



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

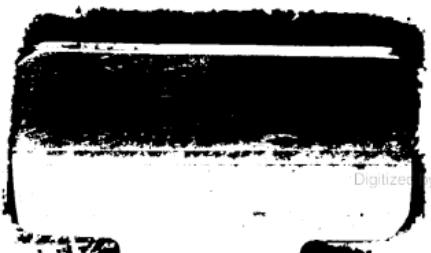
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



Digitized by Google

Digitized by Google

SHOOTING, FISHING,

ETC.

The first physicians by debauch were made —
Excess began, and sloth sustains the trade.
By chase our long-lived fathers earn'd their food,
Toil strung their nerves and purified their blood :
But we their sons, a pamper'd race of men,
Are dwindled down to threescore years and ten.
Better to hunt in fields for health unbought,
Than fee the doctor for the nauseous draught.
The wise for cure on exercise depend —
God never made his work for man to mend.

DRYDEN.

HINTS
ON
SHOOTING AND FISHING
ETC.

BOTH ON SEA AND LAND
AND IN THE FRESHWATER LOCHS OF SCOTLAND.

BEING
THE EXPERIENCES
OF
CHRISTOPHER IDLE, ESQ.
"

SECOND EDITION.

LONDON:
LONGMANS, GREEN, READER, AND DYER.
1868.

SK31
I4
1868

P R E F A C E.

By the desire of a few friends I have been induced to venture on a publication of a second edition of this little work; and having expunged some of the old chapters, erased portions of others, revised the remainder, and introduced a considerable amount of fresh and original matter, I trust this second edition may not be without interest to the practical sportsman, or unacceptable to the general reader.

CONTENTS



	PAGE
Breech-Loaders	1
Precautionary Suggestions in the Use of the Gun	37
Successful Management of the Gun	46
Shooting Dress	61
Receipts for dressing Shooting Boots	69
Grouse Shooting	71
Varieties of Grouse	86
Grouse Disease	88
Black Game Shooting	98
Ptarmagan Shooting	101
Partridge Shooting	104
Rearing Partridges from Eggs	110
Pheasant Shooting	113
Snipe Shooting	121
Hut-Shooting in France	136
Wildfowl Shooting in Scotland	158
How to construct a Punt	157
Breech-loading Punt Gun	161
Woodcock Shooting	179
Deer Forests	199
, Stalking	199
, Driving	200
Stag at Bay	202

	PAGE
Deer Hound	205
Double-barreled Breech-loading Rifle	207
Castration of Fawns	213
Venison	215
Barren Hinds	217
Spayed Hinds	217
The Roe and Roebuck	220
Dogs	222
Diseases in Dogs: The Distemper	232
" Mange	237
" Worms	239
Food for Dogs: The Method of preparing it	241
The Method of teaching Dogs to bring their Game on Land and from the Water, adopted in France .	248
Some Suggestions to those who have Moors and other Shootings to let, with Advice to those who wish to Rent them	256
Form of Lease for Shootings	263
Advice to Young Sportsmen	265
Fishing in Sea-water Lochs, with precautionary Suggestions as to the Use of the Sail in a small open Boat	270
On Sea Lochs, &c.	275
Hand-line Fishing	281
Rod Fishing with White Fly, for Leith, Seith, and Herring	285
Mackerel Fishing with Leaded Line	290
Seith and Leith Fishing, with Rod and Line, with White Fly, by Night, in the Sound of Jura . .	293
The Splash Net: Method of using the same in Sea- water Lochs, and on the Sea-coast	303

	PAGE
The Bag Net	305
Fresh-water Lochs in Scotland; with some remarks on Salmon Fishing	309
Salmon Fisheries	311
Trawl, or Drag Net, for Salmon and Salmon-trout	321
Long Line, for Cod, Haddock, Conger Eel, &c.	323
Long Line Fishing for Haddock, Codling, Whiting, Flounders, &c.	328
Destruction of Vermin	331

HINTS
ON
SHOOTING, FISHING,
ETC.



BREECH-LOADERS.

SINCE the publication of my former little work in 1855, a total change has taken place in firearms for sporting purposes, breech-loaders, constructed on many different principles, having, to a great extent, superseded the muzzle-loader. Whether there will be a reaction in favour of the latter is a problem which remains to be solved, as some sportsmen of experience have resumed the use of the muzzle-loader and almost abandoned the breech-loader, on the plea that the breech-loader neither shoots so hard nor distributes its shot so equally and regularly as the muzzle-loader, but, on the contrary, throws the charge in patches. The accuracy of this opinion is however disputed by

the majority, who adhere pertinaciously to the use of the breech-loader, and who value it independently of its shooting powers, in consideration of its numerous incontestable advantages over the muzzle-loader. From my own experience and observation, I should arrive at the conclusion, that the breech-loader is quite as strong a shooting gun as the muzzle-loader, and frequently kills at much greater distances, although I am willing to admit that a weak cartridge may sometimes come into use either from a mistake in the filling, or from looseness of the charge consequent on a fall upon the ground; but the exception is too rare to be worthy of serious notice, and certainly has only the weight of a feather in the scale of disadvantages, against the overloaded scale of advantages on the opposite side of the balance, combining facility and dispatch in loading without the encumbrance of either powder-horn, shot-belt, caps, wadding, or ramrod, with much greater safety and convenience; and for the service of young, inexperienced, and careless persons, it is immeasurably the safer and more easily managed—consequently the preferable weapon, demanding a small amount of attention in its safe and efficient use in the field, and involving little trouble after the day's sport be over; the wiping out of the barrels alone sufficing, an operation easily performed in a couple of minutes: with the locks interference is rarely necessary.

As regards good shooting, I have witnessed as many good and long shots with the breech-loader by first-rate sportsmen, as I have ever seen with the muzzle-loader; and although I have occasionally observed a fair shot missed, which I fancied arose from the deficiency of the cartridge rather than from a want of skill on the part of the shooter, I have also witnessed a similar result under similar circumstances with the best muzzle-loaders, for even these weapons do not invariably throw their shot with similar regularity. I therefore believe, if a reference be made to the impartiality of the experienced in these matters, they will admit that little difference of consequence exists as to the shooting powers of the two guns, that each gun in good hands is equally effective, but in other respects the advantages on the side of the breech-loader are as innumerable as they are incontestable. In the first place, the sportsman has merely to provide himself with suitable cartridges in sufficient number for his day's sport, and he is ready for action and prepared to join his party. The cartridges may be carried either loosely in the pockets, or in a belt about the body, according to taste or convenience, an extra supply being within reach if a great day be in prospect. The sportsman can't forget his cartridges, that is impossible, but with the muzzle-loader, how often has it occurred to us all, that some one essential

of the many that are required has been forgotten, and the omission sadly interfered with, if not spoilt, the sport of the day. An enumeration of the encumbrances attendant on the old system will, I have no doubt, remind many of the disagreeable irritation which forgetfulness of any one of these has, on some occasion or other, produced, and at the same time create a strong sentiment of satisfaction at the entire exemption from them for the future, which the use of the breech-loader secures. What old sportsman of much experience in the use of the copper-cap gun, does not recollect some one occasion, on which he had either forgotten his caps, or if he had purchased new ones found them on a first trial to be either too large or too small, thus involving some extra difficulty in placing them on the nipple, and after being there finding that they occasionally came off, thus producing a missfire and its usual sequel, irritation and bad shooting. The same objection applies to wadding, which may have been forgotten, or if forthcoming of the wrong size. Caps are, moreover, sometimes damp, in which case numerous missfires result. It also happens that the nipples are sometimes blocked up, then a considerable delay ensues in cleaning them, especially if the 'picker' has been forgotten and no pin can be found; and even with the use of the pin the difficulty cannot always be overcome, as a shot

may accidentally have found its way into the cylinder. Nipples themselves also have been known to break, and sometimes fly out of their sockets. Then comes the monster grievance, the ramrod, with the eternal ramming down after every right and left, surpassed only and aggravated by the more disagreeable and sometimes dangerous but necessary operation of drawing a charge, induced by some mistake in loading consequent on the hurry and excitement of the moment; a woodcock having been marked down which we had just missed; under which circumstance it has sometimes occurred that shot has been substituted for powder in the first instance, or two charges of powder poured into one barrel, or the charge destined for the empty barrel poured into the loaded one, instead of into the empty one, causing the barrel to burst in the next discharge. I am not expressing myself hypothetically, as an instance to this effect came within my own personal knowledge in my younger days, a friend being the sufferer, he having lost two of the fingers of his left hand in consequence of this mistake; in fact, the blunders which occurred in loading with the old system in moments of excitement were innumerable, and were frequently attended with such serious consequences, that an escape from the possibility of their recurring by the use of the breech-loader, cannot but be in the highest degree

satisfactory, and subject for the warmest congratulation amongst sportsmen. Yet notwithstanding the fearful amount of casualties incident to the use of the muzzle-loader, some of the old school pertinaciously adhere to it, and profess to like the operation of loading with the ramrod, and wish to make us believe that the delay consequent on this tedious exertion enhances the pleasure of the sport—that the new system is by far too rapid. I will not dispute this point as a matter of taste, but as the operation is attended with some danger, which the records of the past infallibly and unmistakably transmit to us, not only in the shape of fingers and hands blown off, but in some cases of lives lost, the new system being entirely exempt from all liability to these fearful contingencies, must, on the score of safety alone, be admitted by all impartial persons to be decidedly superior ; and ram-rods also have sometimes been known in guns of small calibre to have become so tightly fixed in the barrel as to have been immovable by the hand. This is not an imaginary case, as it occurred to myself in Scotland many years ago when using an old-fashioned copper-cap gun of 17-calibre. The head of the ramrod was rather large, almost fitting the calibre, and on this occasion on passing it down the barrel it became fixed, in consequence of the wad having turned on one side, so that I could neither move the rod up nor down. As I

was at a considerable distance from home this was a disagreeable dilemma to be placed in. I however vanquished my difficulty by pouring a few drops of water down the barrel from my drinking-cup. The wad was softened and the rod released, but not without considerable delay and annoyance. The worst feature in the use of the ramrod, especially when any difficulty arises, is that the muzzle of your gun may be directed partially towards your body, and even if you are especially careful to avoid this liability, your hand *must* inevitably be over the muzzle, which never can be the case with the breech-loader, with which the process of loading and unloading must invariably be equally easy and safe, especially when the weapon is in the hands of a careful and experienced person.

A further objection to the ramrod is, that it may be broken, and I have known instances to this effect, when the party, having no loading rod, was obliged to return home. I was once present when a ramrod was shot out of a gun, it having been left on the top of the load in the hurry of the moment, grouse having unexpectedly passed exactly as the wad was rammed down on the shot; and, strange to relate, after the discharge it was not only recovered, but found to be uninjured—a search having been immediately made in the heather in the direction of the shot.

When cartridges are of the right size they are easily inserted, and as easily extracted, and although an exploded cartridge may sometimes slightly adhere to the barrel in wet weather, it is readily removed by the judicious use of the extractor, and an unexploded cartridge on the return home at night after the day's shooting is over may also be expeditiously and safely extracted with the extractor; if it does not readily yield to the finger, which it will do nineteen times out of twenty. It is incorrect to assert that there is any danger of an explosion arising from this simple operation, as the withdrawal being in an horizontal direction, the end of the pin cannot be brought into forcible collision with the cap so as to cause ignition, but I can truthfully affirm, as far as my own observation and experience are concerned, that a sticking cartridge under any circumstances is a very rare occurrence. A statement has been made to the contrary, probably by parties prejudiced in favour of some other principle of breech-loader, but it derives its origin rather from the imagination than from the real and exact character of the operation.

It has also been asserted with equal positiveness that a pin cartridge is liable to explode if not properly inserted, the pin being forced down on the false breech by an attempt to close the barrels; but this contingency must strike every ex-

perienced person as practically impossible, as the copper head of the cartridge offers so strong a resistance under these circumstances that the barrels cannot be brought into close conjunction with the false breech even if any inexperienced sportsman were so unwise as to make the attempt; consequently, the point of the pin cannot possibly be brought into direct collision with the base of the false breech so as to produce an explosion, and even if such a result had been effected by some combination of circumstances difficult to be anticipated or explained, which I very much doubt, it supplies no argument against the general use of the improved Lafanchaux; indeed, when we take into consideration the fact that the Lafanchaux has gone through an ordeal of more than twenty years' trial in the hands of thousands of sportsmen in England and in France, and that it is admitted by the majority to be the best, most efficient, and safest weapon which can be used, neither this nor any of the many frivolous objections which have recently been urged against it by prejudiced parties can be admitted by any impartial sportsman of practical experience to have any good foundation to rest upon. If the Lafanchaux were really liable to all the objections which have recently been manufactured against it, it is not probable that it would have continued the favourite weapon of the majority of sportsmen in England and France;

its component parts are as strong as they are simple, and no gun in use can possibly be more safe. There is no objectionable complication of springs, joints, or screws ; the system is so simple and works so easily that no part of it can easily get out of order, so much so, that I have seen first-rate weapons on this improved principle which have been in constant use for six or seven years, as sound and efficient as the day on which they left the workshop.

Sometimes a new pin may be required after several years' hard work—cost only two-and-six-pence—but the pins, joints, and screws, in fact all the materials used by first-rate gunmakers, are of such excellent quality, and so well hardened, and so highly polished, and so well adjusted that, wearing out before the barrels become unfit for use seems next to impossible. Indeed the materials and workmanship are so good, and all the parts so well adapted to each other, in guns by first-rate makers, that it is not likely that any one part will give way before the other ; so that when the gun is fairly worn out, it will not be before the sportsman has had his *quid pro quo*.

With gross neglect the best guns may be spoilt and rendered unfit for use until they have been repaired. I, however, suggest that every sportsman who has any considerable amount of shooting, should at the end of every season send his gun

to his own gunmaker to be examined ; it is a precaution which costs little trouble, and may be attended with advantage, and it is unfair towards the gunmaker to neglect it.

In inserting the cartridge into the gun the sportsman, as a matter of course, will always take care that the pin is in the nick purposely made for its reception, and if it should accidentally slip out—which is a very unusual occurrence—he is admonished of the fact by the impediment which is offered to his attempt to close the barrels by the use of the lever ; and on no account, if he be possessed of any sense or experience, will he endeavour to force the barrels home in spite of such obstruction, well knowing that he would be defeating his own object by so futile and injudicious an exertion of force. I and others have attempted by force, for the sake of experiment, to close the barrels with the pin out of its place, but so far from succeeding, found it impossible even to approach the condition of closing ; the formidable resistance offered by the strong copper head of the cartridge rendering such a result impossible. One of the great advantages of the Lafanchaux system is, that the cartridges cannot be exploded except they are in their right places, as the lever will not act so as to bring the barrels in close connection with the false breech if there be the slightest impediment, and even if the cartridges be rightly

inserted, they cannot be reached by the hammers so as to be exploded if the barrels have not been brought home by the lever; a partial movement will not suffice, as the hammers in that case, even if the trigger were unwisely pulled, and even if they reached the pins, would only strike them obliquely, and no discharge would take place; indeed, I have witnessed several missfires when the barrels have been properly closed in a new country-made gun, arising solely from one of the hammers or cocks being of imperfect structure, striking obliquely rather than perpendicularly. The operation of bringing the lever home to its proper position is so easy and simple that it is difficult to suppose that any sportsman would either neglect to perform or in any way mismanage it; in fact if an attempt were made to raise the gun to the shoulder without the lever having been previously moved, the muzzle would in all probability decline with its weight to such an extent that a discharge would be impossible, even if the sportsman were insane enough to pull the trigger, and if these alleged casualties had occurred, which is subject of great doubt, they suggest no legitimate objection to the Lafanchaux system, as in every case they must have arisen from gross negligence or from unpardonable recklessness. If a man will act in direct opposition to the suggestions of common sense and ordinary prudence, and a

casualty arises, the fault is his, not that of the system.

If reckless sportsmen will pass over or through a fence with the muzzle of a breech-loader towards themselves and they are shot, they merely pay the penalty of their imprudence which would equally have been the case with any other description of gun. It has been alleged by the opponents of the Lafanchaux system, that the pins of the cartridges frequently become bent when packed in boxes, so that when placed in the barrels their oblique positions render a discharge impossible, and that sportsmen are constantly disappointed in consequence of this occurrence. This, like many other objections, I believe to be purely fabulous, as I have never witnessed any missfires on this account, or experienced any myself; indeed a missfire on any account is a very rare occurrence with the Lafanchaux; I have only had one during the whole of a season, and that arose entirely from my own fault, a damp cartridge having accidentally got into my pocket which I had laid aside as unfit for use. The pins are so strong, that it requires immense force to bend them; it cannot easily be done by the hand, if at all.

There are several varieties of the improved Lafanchaux, so equal in their intrinsic worth that the choice or selection is rather a matter of

taste. than of judgment; in some the lever lies closely under the barrels, in others it is brought over the trigger-guard; each lever has the same power over the barrels, keeping them equally tight and close against the false breech. In the majority of guns made on this principle, the small piece of wood under the barrels towards the muzzle end must be taken off before the barrels can be removed, this material being connected with the barrels by a small side pin or bolt; in others which I have seen and used, this small end of the stock is connected with the larger part of it by a joint and cannot be taken off, but in each case the barrels and the small end of the stock are kept in their places by a side bolt; this plan answers its purpose as well as the other, and gives less trouble, and at the same time obviates the risk of the small movable end of the stock being either mislaid or lost—a circumstance which I have known to have occurred with guns of this structure. There has been a further alteration introduced, considered by those who have tried it to be a great improvement; it consists of an arrangement in the lower end of the stock which admits of the barrels sliding forwards horizontally to the extent of half an inch, on their being liberated after a discharge, by a movement of the lever, so that the exploded cartridges can be more easily withdrawn, and

fresh ones more readily inserted ; and this improvement, although of trifling extent in itself, is important, inasmuch as it facilitates the introduction of a further and much larger one, in the shape of two discs projecting from the false breech, which fit exactly into the barrels, thus keeping the cartridges much more firmly and closely fixed than if their ends rested on the flat surface of the false breech. These discs could not be introduced into the original Lafanchaux, the movement of the barrels, on liberation, being immediately vertical, whereas with the partial horizontal movement all impediment is obviated, and I am inclined to believe that guns constructed on this principle will be found to shoot with much greater strength than those made on the original Lafanchaux principle without the discs. The cartridges must be in a firmer and stronger position than if they rested against the false breech, because the discs keep the barrels immovably fixed in their places, rendering any vertical movement impossible, and after a discharge the cartridges are ejected as the barrels slide forward under the influence of the lever. This particular gun is made by Martin of Glasgow, a practical gunmaker of long standing. His father has a large establishment at Paisley, for the construction of all sorts of firearms. In each of these establishments weapons are turned out of first-rate quality ; and at about half the price of those sold

by London makers. Fishing tackle of the best description may also be procured from Martin ; and much valuable information to the sportsman who is going further north for the first time. Dougal of Glasgow has also brought out a gun on a similar principle, but of slightly different structure, his lever not being so powerful as that introduced by Martin ; his gun is, however, said to work well in the field.

There are several deviations from the original Lafanchaux worthy of notice—one by Westley Richards, another by Joseph Lang, each considered as an improvement by those who have used them ; in the former the barrels are liberated by a slight pressure of the finger on a latch, on the upper part of the stock between the two locks, which is regulated by a small spring ; in Lang's, a small horizontal bolt just beyond the trigger-guard, governed also by a spring which, on being pressed, answers the same purpose : and in each case the barrels, after the insertion of fresh cartridges, can be instantly returned to their original position by an upward movement of the left hand, which ought to remain in the position which it occupied at the time of the discharge. The process of reloading in each of these guns is more easy and expeditious than in the ordinary Lafanchaux, and in most other respects each is equal to the best description of them.

The only objection to either of them, which

presents itself, is the spring on which the movement of the lever depends, which of course is more liable to get out of order than the simple, strong, and well-arranged lever of the Lafanchaux; indeed, all the component parts of the original Lafanchaux are so strong and so well adapted to the purpose for which they are intended, that it is difficult to foresee in what manner any disarrangement can occur, whereas we all know that the best tempered springs will under the influence of change of weather sometimes snap. Mr. Bishop, however, informs me that, out of 700 guns of this description which he has sold for Westley Richards, only one instance of a spring having given way has been brought within his knowledge, and that the guns have given general satisfaction. Springs will, however, sometimes snap, but I have never experienced any disappointment with Lang's gun, which I have used frequently and found to answer its purpose admirably. In each system the barrels are easily and securely locked. It cannot, however, be denied, if the same results can be produced without the employment of springs, by well-hardened highly-polished machinery, of simple structure, which will neither give way nor break, but withstand the work of years, that the system which involves merely the use of the latter is the preferable one, especially for the use of those sportsmen who can only afford to have a couple of

guns at a time ; others, who can afford to indulge their fancies in the use of numerous weapons constructed on various principles, and can always have fresh implements at hand in case of any accident arriving, will in all probability select those which admit of more than ordinary facility and dispatch in loading, especially if they believe them to be equally efficient and safe, notwithstanding the slight liability which I have noticed in reference to the springs. There are many other guns recently invented, which, like the two just alluded to, come under the denomination of snap-guns, the working of which depends on the soundness of a spring, which, the inventors tell you, never breaks ; but as all experience is opposed to this favourable opinion, sportsmen will be more disposed to place reliance in the former than in the latter, and, moreover, the spring lever has not the strong binding power of the ordinary lever. It cannot possibly keep the two flat surfaces so closely together, so as to prevent all lateral and vertical movement.

In Martin's and in Lancaster's gun the same description of lever is used. As the movement and action are central, consequently the binding power is immense—greater than in any other guns that I have seen. The inventor of this peculiar lever is, I am informed, a man of the name of Irskine ; but Martin has wonderfully improved it.

A gun brought out by Adam, late Deane and Adam, merits particular notice. The lever, whose external action is downwards, and is moved from the trigger-guard, on which it fits closely, by a downward pressure by the finger and thumb, possesses a double-locking power of immense strength ; and as no spring is employed, and the action perfectly simple, no disarrangement seems possible, the binding power is all that can be desired ; and the process of loading is easily and expeditiously accomplished.

Harrison's and Cogswell's Patent and Self-Cocking, Snap Lever Breech-Loading Gun, is as cleverly contrived a weapon of this particular description as any I have seen, but as the lever is to some extent regulated by a spring, and the internal machinery dependent on joints, there is, I apprehend, a liability to disorganisation ; and on this consideration alone I am induced to give the preference to the Lafanchaux. For rapidity of loading this gun is not to be surpassed, as the closing of the barrels by a slight exertion of the left hand puts the locks at half-cock, and the sportsman is thereby assured that the barrels are securely locked ; in fact, no discharge can take place till everything is in its right position, as the lifters which raise the hammers to half-cock, on the barrels being securely locked, prevent them from falling on the cartridge pins, if this operation

has not been properly performed. Needham's Snap Gun is simple in construction, most effective in use, and can be as expeditiously loaded as any gun of this class. A spring lever instantly releases and secures the barrels with a slight and easy exertion—the spring being the only objection, in my opinion, to this and all other snap guns.

Purdey has also brought out a snap gun, which answers its purpose admirably, and kills as well as any gun he ever made; it however contains the same objections which exist in all snap guns, in addition to a very high price. In the slight difference which exists between Purdey's and Needham's Snap Gun, I think the advantage is on the side of the latter. Daw's Central Fire Breech Loader is held in high estimation by some few enthusiastic sportsmen, and considered by them superior to all guns made on the Lafanchaux principle; the numerous patrons of the latter, however, entertain a very different opinion—they neither place implicit confidence in all the virtues which are attributed to Daw's Central Fire, nor admit the validity of the various objections which are urged against the Lafanchaux.

Of the merits of Daw's Central Fire, as to its practical working in the field, I will not express an opinion, as I have never used one. I have, however, closely examined its structure, and will endeavour to give a description of its component

parts, with a few passing remarks on their value, so that the reader who has not used this weapon may be in a position to exercise his own judgment as to the merits of its structure. The appearance of Daw's gun is decidedly in its favour; it is as handsome a looking weapon as can be made, the only outward indication of its internal machinery being a well-fitting lever over the trigger-guard, which, by being pressed downwards by the thumb, unlocks the breech bolt, by which action the barrels are liberated and rise conveniently for the reception of the cartridges, after which operation they can be as readily closed as in the Lafanchaux, by a slight exertion of the left hand. The heads of the pistons are external and visible, but as these have the appearance of the nipples of a copper cap gun, with the caps on them, they convey no idea, to the person unacquainted with the principle of this gun, of its internal structure, but rather induce him to imagine it to be in reality an ordinary detonator. There are other peculiarities belonging to this gun which I will endeavour to explain. The cartridge differs from the one used in the Lafanchaux both in its external appearance and in its internal structure; there is no pin, and the copper cap is exactly in the centre, resting on an anvil in a cup, perforated at the extreme end.

I add Mr. Daw's description of his gun in his own words. 'In the centre of the base is a me-

talic cup with a touch-hole drilled through the top. This cup is so attached that it forms part of the base itself, the part with the touch-hole projecting forward, inside, so as to be imbedded in the powder; then a small four-grooved anvil, with a point like a Jacob's rifle shell, fits loosely into the cap, and upon this "anvil" is placed the percussion cap. It will thus be seen when the hammer strikes the cap explodes within the breech, and the flame darting down the grooves of the anvil, having only a tenth of an inch to go to the centre of the charge, instantaneous ignition is always the result. There is no escape of gas, nor flash of the cap in the eye to glare upon it, or impair its accuracy for the next fire; no danger of a piece of copper flying against the face.'

The caps in these cartridges being below the surface, are little liable to explosion from an accidental blow or fall, and are in one respect economical, as Mr. Daw informs us they can be twice refilled, and sometimes oftener by good and careful management. One objection to this peculiar system is, and which must strike every sportsman, that these cartridges can only be purchased from Mr. Daw, he being the patentee, whereas the pin cartridge can be procured in any large town in England, Ireland, or Scotland. I must at the same time remark that the refilling of old cartridges is not confined to Mr. Daw's, as the

Lafanchaux can also be refilled two or three times, if the old cases be carefully preserved; many sportsmen take pleasure in performing this operation themselves; it requires little trouble, and with a little practice with the proper implements is easily and speedily accomplished. One advantage of the Daw over the Pin cartridge is, that it can be inserted in any way, owing to the cap being exactly in the centre—consequently the process of loading is as expeditious as in any gun now in use, especially as there is no difficulty in removing the exploded cartridges, owing to the simple but effective action of the extractor, or rather expeller, very similar in shape to a tuning-fork, partially fixed underneath the barrels, but so ingeniously contrived as to eject the cartridges sufficiently on the rising of the barrels to admit of their being easily and instantaneously withdrawn by the finger and thumb. This little instrument performs its functions so well that the adhesion of the cartridge inside the barrels is a rare occurrence, if not impossible, the action of the rising of the barrels bringing the ejector into immediate operation. Whether the tubes or pistons invariably work well, or occasionally get out of order, I am not competent to affirm, having only witnessed their working within doors. The entire machinery of this system seems rather complicated, being composed of bolts, springs, pistons, copper caps, cups,

and anvils, and moreover the movement of the lever is to a great extent dependent on a spring, which fact is worthy of consideration, as it is kept in its place by this means. A question, therefore, naturally arises whether, in the event of this spring breaking at the moment of a discharge, any bad consequences would ensue. If the spring be not necessary, and the lever can be worked safely and effectively without it, why is the lever encumbered with a superfluous and unnecessary appendage?

Mr. Dawe, however, affirms that all the component parts of this system perform their functions admirably, and to the satisfaction of all who have used his gun; but still it cannot be denied that complicated machinery of this character must be much more liable to get out of order than the simpler plain strong works of the Lafanchaux, which involve no complication of springs, pistons, cups, or anvils: in fact nothing that can snap, break, or give way, the only part affording evidence of wear after great use being the pin or bolt which can be replaced for the trifling sum of 2s. 6d. I am, therefore, strongly of opinion that the Lafanchaux will still continue to be the favourite weapon amongst sportsmen in spite of the few real and more numerous imaginary imperfections which have been attributed to it either by persons prejudiced in favour of other systems, or by interested parties; indeed, the undeniable excellence

of the Lafanchaux, and the absence of any valid objection to it, has, I apprehend, been mainly the cause of the numerous trumpery and frivolous charges which have been brought against it in the shape of immovable and self-exploding cartridges, bent pins, and consequent numerous missfires and other evils of a purely fabulous and imaginary character: indeed, the absence of any real evils has left its opponents no resource beyond the manufacture of a large variety of imaginary ones. Some enthusiastic persons have been so far led away by their predilections for other systems and by their prejudices against the Lafanchaux that they have actually pronounced its death-warrant, and wished to represent it as a thing of the past. It, however, strikes me that they have been rather premature in their judgment, as I am credibly informed by some of those who are intimately conversant with this subject, and who are at the same time interested in the healthy vitality of the Lafanchaux, that it was never in a more vigorous condition, and that the orders from its patrons to prolong and perpetuate its existence have recently been unprecedentedly numerous; so that I think it may be safely inferred that it has obtained a reprieve from the judgment of condemnation passed on it by its self-constituted judges, and that very possibly it may survive many of its enemies and oppo-

nents, as well as some of their fancied superior systems.

Lancaster's central fire gun is an excellent weapon, and of handsome appearance, the only formidable opponent, in my opinion, to any of the varieties of the Lafanchaux which I have seen; it is on the same principle as Daw's gun, and although its predecessor by many years, in fact its prototype, has not been improved upon, but, on the contrary, is decidedly its superior, and, as is generally the case with pictures, the original is immeasurably better than the copy. I will state my reasons for this opinion, leaving the decision as to their soundness to the impartial judgment of practical sportsmen. In the first place, the lever in Lancaster's gun is not held, or regulated by, or in any way dependent on a spring, as in Daw's, but depends on a simple, easy horizontal movement, which combines efficiency with great strength, and answers its purpose so admirably that any disorganisation of it seems next to impossible. The end of it fits closely over the trigger guard. Its binding power is immense. Secondly, the pistons in the false breech are in a horizontal position, and strike horizontally and not obliquely as in Daw's; so that they must strike the centre of the cartridge with greater precision than if they descended obliquely; and moreover, their movements are not in any way dependent on or

regulated by springs as in Daw's gun, but are kept in their places by a small vertical bolt or screw, which can be removed in half a minute by a turn-screw, in the event of such an operation being necessary; but they are so well contrived, their structure is so simple, and their movements so easy and effective, that the anticipation of any difficulty with them does not suggest itself as probable. The hammers, as a matter of course, strike horizontally. Another important and remarkable feature in Lancaster's gun, and one which I have not found in any other breech-loader, is, the judicious arrangement of the breech-end of the barrels, which, instead of being rectangular to the bed of the stock or bottom of the false breech as in other guns, is obtusangular, the false breech being acutangular, so that any vertical movement of the barrels after a discharge is impossible, so tightly are the barrels kept in their places by these relative arrangements; and in consideration of the false breech being acutangular, niches or cavities in it for the reception of the heads of the cartridges are so constructed that they lie firmly and immovably in a horizontal position, the upper part of each nich or cavity being deeper than the lower part; each contrivance is equally ingenious and important, and each answers its purpose admirably. No escape of gas or vertical movement of the barrels after a discharge is possible. The former advantage

is not possessed by the ordinary Lafanchaux, and although a strong binding power exists in all the improved specimens of the Lafanchaux, the dove-tailed arrangement introduced by Lancaster must, on the score of additional security and strength, entitle his gun to the claim of superiority.

Martin's gun, with the disks on the false breech and with a lever of similar construction, will, however, be found to be productive of the same results, no vertical movement being possible, and very little escape of gas being perceptible; and moreover, after a discharge by the simple movement of the lever, the cartridges are ejected as the barrels slide forward, and this important result is accomplished without any extra mechanism, as in Daw's and Lancaster's. It is impossible for the cartridges to adhere to the barrels, consequently no extractor is ever required. This immense advantage gives Martin's gun the decided superiority over all the ordinary specimens of the Lafanchaux.

If there be any virtue in this strong binding power of the lever, and I think it cannot be questioned, a strong objection suggests itself to all snap guns, in which this power cannot be attained, a fact which may easily be proved by the simple experiment of fixing each gun firmly in a vice close by the end of the breech, when it will be ascertained by giving a strong lateral movement

to the stock that a slight opening between the barrels and false breech is easily effected in the snap guns, but not in the Lafanchaux regulated by the ordinary lever. Another important fact must not be lost sight of in Lancaster's gun, which is, that owing to the relative positions of the breech end of the barrels and the false breech, no moisture can possibly pass between them so as to reach the cartridges, and this cannot be said of any of the varieties of the Lafanchaux (except Martin's), the breech end of the barrels and base of the false breech being rectangular.

Lancaster's cartridges have no complication of caps, cups, or anvils ; there is merely a sufficient amount of detonating powder exactly in the centre, which is so arranged that when struck it explodes internally. There is a well-contrived extractor of the cartridges which is brought effectively into operation by the action of the barrels as they rise, being liberated by the moving of the lever, so that the process of withdrawing the exploded cartridges and of substituting fresh ones is as speedily accomplished as in any gun now in use. With regard to the central fire, truth demands that I should state that it is by no means a recent discovery, as I have seen an old detonator constructed on this principle by Kavanagh, of Dublin, which was made nearly forty years ago ; but Lancaster has the merit of having fully developed and

turned this principle to the greatest possible advantage, of having produced a gun which approaches as near perfection as any gun can do. The cylinders, pistons, the obtusangular shape of the breech end of the barrels, and the acutangular shape of the false breech are entirely his own inventions, and establish his just claim to considerable merit on this score alone independently of the workmanship of the entire weapon, which is as good as can be found in London. I now add Mr. Lancaster's short and concise description of his gun in his own words :

‘The distinctive features of this gun consist in the first place of the use of a cartridge without any pin as in the Lafanchaux gun, and consequently the entire absence of all escape of gas at the rear on the explosion of the charge. Secondly, the mechanical arrangement is distinct from that of any other gun.

‘The closing and opening of the gun being performed by a powerful lever and eccentric, ‘thus producing a sliding motion prior to the barrels being allowed to rise to receive the cartridge.’

The breech end of the barrels is arranged at an obtuse angle, and the breech fits into the stock at a corresponding retiring or acute angle: thus when the barrel is brought home by the eccentric it dovetailed underneath the breech, and cannot move however often the gun is fired. In

discharging the gun the hammer strikes the piston which is driven forward horizontally, directly on the centre of the base of the cartridge, producing 'instantaneous explosion. On opening the gun an extractor having an automatic movement embraces the periphery of the cartridge and pulls it out sufficiently to admit of its being removed, leaving the barrels in a position for the reception of the fresh cartridges. As a test of the endurance of these guns during the past five seasons, a distinguished sportsman has fired upwards of forty-five thousand shots from a pair of them, which are now perfect in every respect.' The best breech-loader which can be used in a punt is one made by Baddeley, 183 Central Street, City Road, Islington, a description of which will be found at the end of the chapter on wild-fowl shooting.

SUMMARY.

NOTWITHSTANDING the numerous advantages which the breech-loader incontestably possesses over the muzzle-loader, and which the most prejudiced in favour of the latter can scarcely now deny, it is strange that, although this weapon has been in general use in France more than twenty years and

in England during the last fifteen, even within a few years it has been repudiated by some sportsmen as an inferior and less safe weapon. As evidence of the extent to which prejudice will exert its influence, I refer my readers to the twelve following objections urged against the breech-loader in a work recently published. I will enumerate them *seriatim* and reply to them briefly, although they scarcely require an answer, having been amply refuted by the results of many years continuous experience. No. 1. They don't kill as far as the muzzle-loader. *Ans.* They kill quite as far and shoot as strong; a fact which may be easily ascertained by an experiment at a target. No. 2. They are much heavier. This is not invariably the case, and when it does occur, it is only to a slight extent; for, although the barrels are somewhat heavier at the breech end than ordinary barrels, it must be remembered that there is neither ramrod nor heel-plate, and no loading rod to be carried. The false breech and lever of course add something to the weight, but to so trifling a degree as not to occasion any inconvenience, so that the objection is of small consequence. No. 3. They are more expensive. *Ans.* This depends on circumstances, and very possibly is not the case, when the sportsman makes his own cartridges and refills them two or three times. It must also be taken into con-

sideration that no ammunition is expended in useless discharges or otherwise wasted. No. 4. Does not last so long. *Ans.* This is questionable. I certainly entertain a very different opinion. No. 5. Greater liability to get out of order. This is more than doubtful with a first-class Lafanchaux, for if a new pin may be required after four or five years' constant use, new nipples in copper-cap guns are also required within the same time, as they also wear out, become too large at the opening, sometimes split, and occasionally fly out of their sockets. No. 6. Recoil greater. This is very questionable, I certainly have not found it invariably to be the case. No. 7. Penetration of wet between the barrels and false breech not to be avoided in wet weather. *Ans.* In some breech-loaders this inconvenience may occur to a slight degree; with Lancaster's gun it is impossible; but with care, with any description of breech-loader, missfires in consequence of damp are much rarer than with the muzzle-loader, copper caps, if unprotected and exposed to the weather, being as accessible to damp, if not more so, than cartridges—under similar circumstances, as far as my personal experience is concerned, I can truthfully affirm I have had many more missfires with copper caps than I have ever had with cartridges. No. 8. Greater risk of bursting. *Ans.* This opinion is opposed to fact

and refuted by experience. Breech-loaders rarely burst—indeed not one solitary instance has come within the reach of my experience, and I am aware of many instances of muzzle-loaders having burst.

There is one especial negative circumstance in favour of breech-loaders, which is to be found in the fact of a total absence of several causes which occasion the bursting of the muzzle-loader, and which have come within my own immediate knowledge; viz. mistakes of various kinds in loading, slipping of the wad which covers the shot a short distance down the barrel, by which means a vacuum is produced between the powder and shot, and bursting almost certain if the gun be subsequently directed downwards, and discharged as in the case of a hare or rabbit being shot at, and these liabilities can never arise from the use of the breech-loader. No. 9. Safety doubtful. Immeasurably safer; not only in consideration of the reasons given in the preceding answers, but, on other equally valid grounds, breech-loaders are safer in their general use than a muzzle-loader ever was, or ever can be.

In loading and in unloading they are perfectly safe, which cannot be said of the muzzle-loader, the contrary being incontestably and unfortunately the fact, as it is notorious that fingers and hands have been lost, and sometimes a life sacrificed, in

the process of loading and unloading. The hand can neither be over nor near the muzzle, in either loading or unloading, of the breech-loader, neither can the muzzle be towards the body of the sportsman ; with the muzzle-loader, the reverse is the case. In the use of the muzzle-loader, the fingers, and sometimes the entire hand, are over the muzzle during that process ; indeed there is no escape from this liability. No. 10. Trouble of making cartridges. *Ans.* No sportsman is necessarily subject to this trouble, as cartridges can be purchased in any number ready made. No. 11. Cartridges dangerous to carry. *Ans.* This is merely ideal : they are perfectly safe loose in the pockets of a shooting-coat, or when carried in a leather belt or case, quite as safe as a powder-horn, if not more so. No. 12. The weight of cartridges objectionable. *Ans.* They are not heavier or more irksome to carry than powder-horn, shot-belt, caps, wadding and loading rod, and used with much less trouble, with greater ease and dispatch, and with immeasurably greater security.

When a few cartridges are carried loose in each pocket the weight is scarcely felt ; and in the event of a sportsman shooting alone and unattended, and consequently being under the necessity of carrying the whole number of cartridges he thinks he may possibly require for the day's use, the weight would not certainly exceed a

similar amount of ammunition carried in powder-horn and shot-belt, with the possible addition of some steel or copper charges, which were considerably in use in former days; and are much heavier than any cartridge can be. If fifty cartridges were put into one scale, and powder-horn and shot-belt containing a sufficient amount of ammunition for a similar number of shots were put into the other, together with caps, wadding, and loading rod, I rather fancy the preponderance would be in favour of the latter scale.

On the score of safety, as the writer to whom I have alluded considers the muzzle-loader by far the safer weapon, I cannot omit to mention some other negative advantages in addition to those I have already enumerated, which the breech-loader possesses over the muzzle-loader, which arise from the facility of unloading by the withdrawal of the cartridges on entering a house, either during the day or at its close when the sport be over, an operation so easily and expeditiously performed, that it is difficult to suppose it will ever be neglected under such circumstances, so that within doors at all times the breech-loader must be a perfectly harmless weapon, whereas with the old system, how often have loaded guns and their usual companions, well filled powder-horns, been brought into a house and left carelessly about, and proved the fertile sources of dreadful and

sometimes fatal accidents. In farm houses and in keepers' cottages, a loaded gun in the corner of the room or on a rack, and a powder-horn on the shelf, were very common and usual objects, and have frequently proved the unintentional instruments of destroying life in the hands of the inconsiderate and careless.

To withdraw the cartridges, put them into a place of security, wipe out the barrels and put away the gun, are operations which can be performed in about a couple of minutes: it must therefore be hoped, as they are conducive to complete security, and at the same time necessary for the maintenance of the good condition of the gun, they will never be lost sight of or neglected.

PRECAUTIONARY SUGGESTIONS IN THE
USE OF THE GUN,
ESPECIALLY AS TO LOADING.

So MANY serious accidents have happened, and are continually occurring in the simple process of loading, from the neglect of the most ordinary and obvious precautions, that it may not perhaps be amiss to make a few observations on the subject, with a view, if possible, of preventing their

recurrence, by inducing sportsmen to adopt some fixed rule and plan, never to be departed from.

Of the several causes of accident during loading, the most common is that of loading one barrel immediately after having discharged it, with the lock of the other barrel at full-cock, the jarring of the ramrod in loading causing the lock to go off: how this takes place with a good lock, perfectly clean, is difficult to explain satisfactorily. The only way to guard against it is to make a rule, immediately after discharging only one barrel, of putting the lock of the other on half-cock, and also invariably to place the gun in such a manner that the barrel which you are loading is *nearer* to your hand than the loaded one, in which case your right hand will *not* be *over* the loaded barrel when you are ramming down your charge, and will escape intact in the event of an accidental discharge. Many will be ready to say my suggestion is superfluous, as it is not likely any one would ever load one barrel with the lock of the other at full-cock, if they thought of it, and if it were not done in the hurry of the moment. I am well aware of the justice of this observation, but as, unfortunately for those who have suffered, it was merely because they did *not* think of it, I trust it may not be entirely without advantage to invite attention to the subject, so that the vital necessity of carefulness may be ever present to

the memory even in moments of the greatest excitement, for it is generally at such times that accidents occur.

As an instance of the uncertainty of locks, I can state a circumstance which occurred to myself a few years since. I had discharged one barrel at a bird, and having wounded it, was watching its flight, resting the stock of the gun on the ground, when the other barrel went off, nothing whatever having touched the lock, as I was standing in an open place, and no dog was near me at the time. As I never allow the muzzle of my own gun to be towards myself, having received an instructive lesson at the very commencement of my sporting career on this point, I was of course intact; but I was somewhat alarmed, and much astonished, as my gun was a first-rate one, and unimpaired by use. I however found, on examining the delinquent lock, that some common oil had been used, and had become, as is invariably the case with bad oil, thick and adhesive, thus impeding the safe and perfect movement of the lock, and rendering the retention of the scear by the tumbler doubtful and uncertain. Hence the necessity which devolves on every sportsman of looking after his own locks, and seeing that only suitable oil, such as is used by watchmakers, or such as may be made specially for the purpose, is applied, as this will neither cake nor become glutinous, nor ad-

hesive. The bad oil, I have no doubt, was the occasion of my accident.

When the gun is loaded, *never* allow the cocks to remain *down* on the nipples, either when in or out of hand, as this position is dangerous, and many very serious accidents have arisen from it, under the erroneous impression that it was safer than half-cock, when, in fact, it is not more safe than full-cock, even if so much so.

Three accidents from having the cocks down—one fatal, the second most serious, and the third only ending in alarm, and conveying admonition for the future, came within my immediate knowledge in France. A Captain U—— was out shooting a few miles from where I was residing; he had to pass through a thick hedge, and let down the cocks, and was drawing the gun after him, thinking himself quite safe, the muzzle being towards him, when one of the cocks was drawn back by a branch, and released; a discharge was the consequence, and the unfortunate gentleman was killed on the spot.

Another case was that of a Frenchman, with whom I was personally acquainted. He was out snipe-shooting, and wished to pass from one marais to the other, the two marais, or marshes, being divided or separated by a canal; and by way of passage from one to the other, a strong pole had been laid horizontally across the canal, fastened

to another pole inserted perpendicularly, midway between the two banks, by which means both poles were steady. The Frenchman let down the cocks upon the nipples, and extended the butt-end of his gun towards the perpendicular pole, with a view of catching the same with the guard of his gun, and thereby enabling himself to keep his equilibrium as he passed over the pole; but unfortunately he caught the pole with one of the cocks of his gun instead of with the guard, which being raised, and almost instantly released, a discharge took place, and the entire contents of the barrel were received in the hand and arm, from the palm of the hand up to the elbow.

The third instance was that of a loaded rifle. A party of Frenchmen with whom I was acquainted were going out boar-hunting. Intending to proceed to the scene of action in a light car, they had previously loaded their rifles, one of which was being handed into the vehicle by the owner with the cock down and the muzzle towards himself; when the cock caught part of his friend's dress, was raised, released, and the rifle discharged; the ball passed close by my friend's body into the ground. A serious alarm was the sole consequence, in addition to a very instructive lesson conveyed as to the future, not only as regards the cocks of the gun, but also as to the *direction of the muzzle*, the escape having been an 'hair's-breadth' one.

I have frequently witnessed the accidental discharge of guns in the hands of the careless and unskilful; the excuse has been that they were merely uncocking their gun, and that the cock slipped, or some or other equally unsatisfactory reason. It is always advisable, when you cannot altogether avoid such sportsmen, to give them plenty of room, and to avoid, if possible, coming within range of their shot. There are also others who designedly kill game close to you, piquing themselves on the close shooting of their guns, and the accuracy of their aim; but no sportsman with any experience, sense, or good feeling will be designedly guilty of so imprudent and improper an act, as the best gun that ever was made will occasionally throw a few shot wide of the main charge: of this fact I have witnessed very extraordinary instances, one of which occurred to myself. I had shot at and killed a snipe, which was at least twenty feet from the surface of the ground, when I found that one shot had entered the eye of one of my dogs standing about fifteen or twenty yards to the right of the direction in which I shot: what caused the shot to go thus obliquely I cannot conjecture; the gun was a first-rate one, made by one of the best London makers.

There are but few additions to be made to the contents of the preceding chapter, as most of the suggestions as to the muzzle-loader are equally

applicable to the breech-loader; the old chapter is, however, allowed to remain intact, not only in consideration of that circumstance, but in virtue of the fact that some sportsmen still adhere to the old system, and it is possible others may return to it. One suggestion cannot be too often made, or too frequently repeated, equally applicable to each system, which is, that the muzzle of the gun should never, under any circumstances, be directed either towards yourself or towards anyone accompanying you: to the first liability the sportsman is rarely exposed in the use of the breech-loader, the process of loading and unloading being at the breech end, but with regard to those who accompany him the same liability exists as with the muzzle-loader, if the gun be carried carelessly, hence the necessity of enforcing this salutary regulation applicable to the old system. It may be further suggested, that before entering a house or lodge during the day for the purpose of taking lunch, or with any other object, that the cartridges be withdrawn; and at night when the day's sport be over in returning home they should on no account be allowed to remain in the barrels, for independently of the security ensured by their removal, the barrels ought to be wiped out; this precaution is necessary with all breech-loaders, but especially so with Lancaster's, Daw's, and Needham's, where no external indication of the gun being loaded is

visible. As the wiping out process is performed in about a couple of minutes there can be little excuse for the neglect, especially as the omission is injurious to the gun. In going through or over any difficult fence, or getting over a wall, or on entering or leaving a boat, it is better to take the cartridges out than to leave them in; in fact, in all cases where there is any liability to accident. Since writing the preceding chapter, in which I have related several accidents which arose from allowing the cocks of copper-cap guns to remain on the nipples, which came immediately within my own notice, another of a very serious character happened within a short distance of the place where I was residing in Scotland previous to my leaving that country, and to a sportsman of experience. He had been out wild-fowl shooting on a sea-water loch, and on reaching the shore on his return, previous to getting out of the boat, had unwisely let down the hammers of a copper-cap gun on the nipples, and, after being ashore, attempted to draw his gun out of the boat by the muzzle end, when one of the cocks, on meeting with an impediment on the side of the boat, was raised and instantly liberated; a discharge was the consequence, and, as the muzzle was immediately under the right arm, the whole charge of shot was lodged there close to the body, so that amputation of the entire limb was necessary. I men-

tion this serious disaster, although it arose from the mismanagement of a copper-cap gun, and might not occur under similar circumstances in the use of a breech-loader, because it imperatively suggests the vital necessity of not allowing the muzzle of any gun to be towards the user of it, whether it be loaded or unloaded, cocked or uncocked.

The observance of this rule is so important that I do not scruple to reiterate it, especially as year after year serious accidents arising from its violation are frequently recorded, in spite of the monitions of the past.

In the field no sportsman ought to fire across, or in the direction of anyone, as is too frequently done; for however wide any person may be of the line of aim, one shot may sometimes take an oblique direction, especially in cover, or near any objects from which shots may glance off. It is impossible to tell in what direction a shot may go which strikes a tree or rock; and in reference to distance, it is most difficult to prescribe the precise limit which the strongest shots in a charge may sometimes reach, with sufficient force to inflict injury in the event of their striking the eye of any living thing.

Those who wish to ascertain the fact of the irregularities and peculiarities in different discharges from the same gun, have merely to make

a number of experiments by firing over the surface of water on a perfectly calm day—a target is not sufficiently wide for the purpose, and is at the same time no certain test as to distance, whereas on water the most distant as well as widest shot may be seen to strike.

Before reloading Daw's or Lancaster's gun special care must be taken to place the cocks on half-cock, as in closing the barrels; if this absolutely necessary precaution were neglected the cartridges would come into forcible collision with the projecting points of the pistons, and if a discharge did not occur the cartridges might be damaged.

It is not likely that a precaution so manifestly important should be neglected, but as in the hurry of the moment I know that the neglect has occurred, but with no consequence beyond slightly damaging the cartridges, I am induced to refer to the subject for the guidance of those who may use these guns.

HINTS ON THE SUCCESSFUL MANAGEMENT OF THE GUN.

As **EVERY** man who takes up a gun is anxious to make a good use of it, and all are not equally

successful, and some much disappointed when they fail, it may not be out of place to direct attention to a subject so interesting to sportsmen, and make some inquiries into the occasional causes of failure. When there is no apparent physical impediment, and when success is sought by frequent and persevering efforts, it seems strange that it should not be attained; still how many are there who have shot for years, and who, admitting the existence of no physical obstacle, yet remain bad shots, as stationary as many billiard-players, who after twenty years' practice and experience play nearly as at first. The failure perhaps in both cases may be attributable to the commencement not having taken place under favourable auspices and on sound principles, as both require some preliminary instruction to ensure progressive success. If a man in the first instance be taught to stand in a good position, hold his cue correctly with one hand and place the other firmly, but not stiffly, on the table—to handle his gun in a sportsmanlike manner—he must advance in both; but if in either case the preliminary instructions be disregarded or neglected, and a start be made on false and erroneous principles, the odds will then be great against either progress or success.

To succeed in either billiards or shooting, the commencement ought to be early in life; few

who start late succeed in attaining more than mediocrity.

I place billiard-playing in juxtaposition with shooting, because it depends equally upon the same physical qualities and upon the early exercise and practice of them ; and as it is important to success to maintain these in all their integrity, the golden rule of moderation must be observed in all things, as *all* excesses interfere with the economy of the stomach, and consequently, to a certain extent impair both sight and nerve and unhinge the whole system ; hence the frequent inequality of the shooting of some good shots, who indulge too freely in the pleasures of the table : but over-fatigue, too severe walking, and too great anxiety, will frequently be attended with the same unsatisfactory result.

I will now address myself to beginners, and endeavour to convey such suggestions as I believe, if attended to, may be serviceable.

A young gentleman who has never shot, after having been taught in the first instance by a competent person how to handle his gun, cock and uncock it with facility, firmness, and safety—to bring it up in a sportsmanslike manner to his shoulder—to be careful in loading, and to adopt a safe method of carrying it—should then endeavour to bring it up to some object so as to cover it, and when he can do this with ease and accuracy, he

may then attempt a few sitting shots at small birds, taking care to use small shot. When he succeeds in this respect I should recommend his going out, with some friend who is a good shot, but without his gun, merely to observe how he kills his game in all the different positions in which it may present itself; how he manages the cross, and side shots to the right and left. By devoting a few days to observation in this manner, he will be laying the foundation for more rapid progress than if he had shot for weeks alone, especially if his friend will explain certain shots to him. As a looker-on he will soon perceive how little occasion there is for anything like haste or hurry, and not fail to remark the time which intervenes between the rising of a bird when near at hand, and its reaching the distance at which it ought to be shot at: this will teach him the advantage of coolness and the impolicy of haste. After a week he may take his gun out with his friend, but with no ammunition: let him merely try to cover his game on its rising, and when he thinks he can accomplish this, let his gun be loaded with powder only; and if it be observed that he shoots steadily, then let shot occasionally be put in, but without his knowing it, although of course previously warned that he would be indulged with this experiment; and should this succeed, and the beginner shoot steadily and without impatience

or hurry, then the shot may be continued ; but if, on the contrary, hurry and want of coolness be exhibited, the shot must not be persevered in, nor again tried till the most perfect calm and *sang froid* be restored.

The very best shot I ever met with in my life, and by far the coolest, told me he was taught in this manner by his father, who was a first-rate sportsman. When confidence and coolness are acquired, further instructions may be conveyed as to side and cross shots: the principle once established, the distance at which you ought to shoot before game under different circumstances will soon be learnt from experience. When a bird is merely crossing at an ordinary pace, a foot before him will suffice ; but when a pheasant, black game, or grouse are coming over your head at full flight, as the pace then is very rapid, the gun must be directed at least two or three feet ahead.

One of the principal reasons of the continuous bad shooting of some sportsmen is to be found in their habit of merely shooting *at* their game ; the consequence of which is, that they never, except by mere accident, kill a cross shot. On some days when they get a number of straightforward shots, they are very successful, but when the majority of shots happen to be cross ones, they scarcely kill anything ; and they cannot understand the reason,

and merely tell you they are in bad shooting, or the gun does not suit them, as they thought they had covered every bird they had shot at. The habit of shooting well *before* game is easily acquired, if attempted early, and practice will soon make the judgment correct in this respect. Where this principle is well understood and acted on, good shooting must be the result, provided there be no physical obstacle, and the necessary aids and appliances are not wanting, one of the most essential of which is a suitable gun.

In securing a first-rate gun there is no difficulty, but a gun may be first-rate and at the same time altogether unsuitable to the person using it, if he has given his orders indiscriminately, or taken any gun the gunmaker may have thought proper to recommend. A good and experienced shot may shoot well with any good gun, whatever its peculiar make may be, but he will shoot better with one that exactly suits him, especially in quick shooting in cover ; it is therefore essential, in the first place, to ascertain the form and make of gun you require, and give your orders accordingly ; and one of the most important features in a gun, as to your advantageous management of it, is the length of the stock between the trigger and heel plate, which has more influence on correct shooting than any other circumstance, especially if the gun be a heavy one. The requisite interval will depend

upon the length of your arms—if these be short, the interval should be 14 inches to $14\frac{1}{2}$; for a person of middle stature, $14\frac{1}{2}$ inches; and for a tall person with long arms, $14\frac{3}{4}$ to 15 inches. If a person with long arms were to use a heavy gun with the interval of only 14 inches between the trigger and heel plate, however good a shot he might be, he would find himself disappointed, as the gun would scarcely ever come up to the object on his first bringing it to his shoulder, and he would constantly shoot under rising birds, particularly cocks. Let those who are sceptical on this point try the experiment, and I believe they will find my theory correct: even an eighth of an inch makes a wonderful difference in this respect.

The next consideration is the bend or inflection of the stock, which ought to be in proportion to the length of the neck; a short neck requiring a straight stock. But the bend of the stock is not of so much consequence as its proper length; because if the bend were exactly what it ought to be, the gun would not come up properly, so as to cover at first sight the object to which you wished to direct it, if the stock were a quarter of an inch too short. Having the bend and length of the stock all right, the next portions worthy of consideration are the locks, which are as important to good shooting, as any other part of the gun, especially if you have several guns. With bad

locks, or with locks of too great, or of unequal strength, either by the main spring or seear spring being too powerful, or the incision in the tumbler being too deep, it is difficult to shoot well; and unless especial care be taken in giving precise orders in this particular, there may be annoyance and disappointment. I invite attention to this point because I have not unfrequently met with guns made by first-rate makers signally deficient in this respect, although they were highly finished in every other particular; the fault having arisen solely from carelessness and inattention.

If your locks are of equal strength, and the stocks of the same length, the same force will be required to pull the trigger, and there will be no disappointment; but if your locks be unequal in strength in the different guns, the easier locks will go off before you are prepared, and the harder ones not till you have given a *second* pull, and the point of your gun be lowered, than which nothing is more vexatious; and as with a long stock the finger will come more readily and more heavily upon the trigger than with a short stock, it is of as much importance to have your stocks of similar length as it is to have your locks of equal strength. The above statements being the result of long and frequent experience, I think will be found to be correct, and well worthy of attention.

Although many of the remarks in the preceding

chapter in reference to the management of the muzzle-loader are equally applicable to the breech-loader, a few additional hints, suggested by recent observations, reflection, and experience may possibly not be unacceptable to the sportsman, as anxiety to excel as a shot in the present day is too strongly exhibited in the various matches and handicaps at Hornsey Wood and elsewhere to admit of a doubt or question.

With this view of the subject it may be as well to state the conditions on which successful shooting depend, and these are equally of a scientific and practical nature, so that to attain the desired end, the theory must be thoroughly understood before the practice can be effectually and successfully carried out. How to direct the gun under the various positions relatively to the game to be shot at, before an expectation of becoming a first-rate shot can be legitimately entertained, must be thoroughly learnt and ascertained ; in fact, the sportsman or pigeon shooter who is desirous of *killing* whatever he shoots at, must learn so to direct his gun that the object aimed at is hit with the centre of the charge. This is the main point—to hit birds without killing them will not answer the purpose ; attention may therefore be very properly invited in the first instance to the preliminary part of the business—i.e. the theory, which comprehends the

laws of gravitation, the flight of birds, form of gun, its elevation, and other minor particulars.

In reference to gravitation it must be observed that, agreeably to that law, the shot on leaving the muzzle of the gun gradually descends from the line of trajectation till it reaches the earth, and at a distance of forty yards descends from eight to twelve inches, so that it is evident, if the line of sight were parallel with the axis of the barrels of the gun, and a correct aim were taken at any bird at a distance of forty yards, it would inevitably be missed, but as the barrels are much thicker at the breech end than at the muzzle, and as there is sometimes an elevated rib lying between the two barrels, somewhat higher than their surface, the line of sight can never be parallel with the axis of the barrels, and must intersect the line of trajectation at the muzzle ; so that if the experiment could be made of extending the lines of sight and trajectation to the distance of forty yards, it would be found that the latter was from eight to twelve inches higher than the former, thus overcoming the difficulty arising from gravitation. But there are other difficulties to which attention must be directed, notwithstanding the theory which I have just laid down as a general one. The point blank distance of most guns cannot be relied on beyond twenty-five or thirty yards ; the sportsman must therefore always endeavour to shoot over all birds

going straight away from him which are beyond that distance ; in which case, if the aim be correct, he will strike whatever he shoots at with the centre of the charge ; and when birds are at from forty-five to fifty-five yards distance, the elevation must be increased, and in all side shots at long distances the same practice must be attended to, as well as that of shooting well forward, from one, two, and sometimes three feet in advance—and sometimes even more—if the birds are in full flight and going rapidly down wind, as will frequently be the case at the end of the season ; as it must be remembered that grouse, partridges, and black game are much stronger on the wing, and proceed with much greater rapidity in their flight in November and December than in August and September, especially in windy weather. Those who have had much experience in wild shooting are well aware of the necessity of shooting well forward at all crossing birds late in the season, having frequently received practical instruction on this point by killing birds in the rear of a covey when their aim was directed at the foremost birds, which have escaped intact. Three feet before a crossing bird seems a long distance, but when the pace at which a grouse is flying down wind in November or December be taken into consideration, as well as the fact that a small interval must elapse between the pulling of the trigger and the

shot reaching the point aimed at—although the gun be brought up exactly three feet before the bird, and the trigger finger obeys and sympathises with the sight—the distance is in reality not so great, indeed it is sometimes insufficient. Guns are frequently found fault with when the sportsman alone is to blame, not having shot sufficiently high or sufficiently in advance ; the consequence of which want of skill is, that what is shot at is hit with the outside instead of with the centre of the charge. First-rate shots generally praise their guns for hard and strong shooting, second-rate shots are frequently undecided on this point ; but the difference really exists between the men, and not between the guns.

It is a bad plan to bring the gun up to the shoulder too soon. When birds rise within a moderate distance, the direction which the bird is taking must in the first instance be observed, and the gun not be put to the shoulder till the bird has reached the proper distance to be shot at, and the sportsman has decided how he intends shooting ; the gun will then come up exactly as the sportsman wishes it, if he be under the influence of no physical defect. If a bird has risen at thirty-five yards distance, and is flying rapidly to the right, it will be advantageous to bring the left foot well forward before bringing the gun to the shoulder : the sportsman will then be able to direct the

gun as he desires, and at the same time obtain an easy shot. A shot at a bird flying swiftly to the right is rather a difficult one, because the sportsman must be in a cramped position, especially if the right leg be in advance, in which case he is unable to shoot sufficiently forward.

The embarrassment consequent on this cramped position all sportsmen who have had much cock-shooting in difficult covers have often experienced. I have frequently been subject to it when out woodcock shooting either in very rough covers, or walking on the shingle along the sea-shore, where I found it was advisable to walk slowly, so as to have the command over my legs in the event of a woodcock suddenly rising, giving me a difficult shot. When birds fly to the left, there is no difficulty in getting the gun well up to the shoulder and in being able to shoot sufficiently forward. The sportsman ought never to shoot at a bird in the act of crossing him, if he can obtain a fair shot at him either as he is advancing or after he has passed. Either of these two oblique shots is easier than the one at the crossing bird, but when there is no alternative, this is one of the cases in which the gun cannot well be directed too much in advance, especially if the flight of the bird be rapid. In the case of birds coming immediately towards the sportsman, his best

chance is at thirty-five yards for the first barrel, and for the second barrel as soon afterwards as he can manage ; his worst chance is after the bird has passed, as so much time is lost in turning round, so that only a long shot can be obtained ; besides, in taking a bird as he is advancing, if there be a miss, another chance may be had ; moreover, an advancing bird is a very easy shot, when the sportsman has accustomed himself to take advantage of it—I prefer it to all shots. To kill birds flying rapidly over your head requires considerable skill, as it is necessary to shoot three or four feet in advance of them—the precise distance can only be learnt from experience. At the time of pulling the trigger, the bird must be momentarily lost sight of. All these shots can be better managed with both eyes open than with one ; indeed, on all occasions I think the two eyes have the advantage. Black cocks may be killed at a great height when passing immediately over your head, if the gun be properly directed well in advance. I don't think their flight is so rapid as that of an old cock pheasant when well on wing. Partridges are perhaps more rapid in their flight when driven and coming over your head in this way than either grouse or black game. The snipe is a very easy bird to kill, if you go down wind on him, as he flies round you, and when in

condition his flight is regular. The woodcock is a much more difficult bird, owing to the extreme irregularity of his flight, sometimes as rapid as a hawk, at other times as slow and heavy as an owl. The snipe is constantly alluded to as a difficult bird to kill, and the woodcock as a very easy one, but I have arrived at a very different conclusion after considerable experience in each sport. A particular friend of mine, formerly residing in Scotland, now unfortunately no more, killed on and in the immediate vicinity of his own property on the west coast of Scotland, between four and five thousand woodcocks, and he entirely concurred with me in this opinion, and no better shot ever put gun to the shoulder.

I believe if an appeal were made to the experience of old sportsmen, who have had equal opportunities of judging of the merits of this question, it would be found that a much larger number of snipes had been shot consecutively than of woodcocks. I admit that the excitement of woodcock shooting is greater than that of any other bird shooting; and I am ready to allow that that may have considerable influence, but I nevertheless believe, independently of this circumstance, that the woodcock is the more difficult bird to kill. If he could be found in the open marsh, that probably would not be the case, as the difficulty is partly induced by the nature

of the locality in which he is found, independently of his sudden and unexpected rising, and his habit of flying behind the first rock, bush, or other obstacle which may present itself. A woodcock scarcely ever continues his flight straight forward, when he reaches any object he can dodge behind.

SUGGESTIONS ON THE SHOOTING DRESS.

DRESS, generally speaking, is so much a matter of caprice, and occasionally involves so much *amour propre*, that it would be hazardous to give an opinion or offer advice on the subject. Almost every one is influenced by his own taste and fancy, occasionally assisted by the deferential suggestions of a confidential tailor, as to what is most suitable and becoming, what is fashionable and what is not so.

But as regards a shooting-dress the matter altogether changes its complexion, as it involves not only considerations of suitableness, but also of comfort and health—objects of far more importance than external appearance. The sort and quality of dress will depend upon the time of year in which its use is required, and the country in which it is intended to sport. If in Scotland,

on the moors, great benefit will be derived from having the coat, waistcoat, and trousers of woollen, on account of frequent exposure to wet and damp in the shape of fogs, mists, and rain ; and as during the same day the sportsman will be often subject to alternations of extreme heat and cold, as he ascends from the valleys to the tops of the mountains, he will be less likely to suffer from these sudden and frequent transitions, and less liable to be chilled in a woollen than in any other dress, and will feel less uncomfortable when wet through.

The difference between the degrees of temperature in a valley and on the top of a mountain in Scotland, even on a fine day, must be felt to be known and believed. The transition on a very warm day in August, as you reach the summit of a mountain breathless in the pursuit of game, is trying to any constitution, but more especially to those of sportsmen who have just left London at the end of the season. The only way to guard against such prejudicial influences, to which all must be accessible under similar circumstances, is to be provided with suitable clothing ; and none will answer this purpose so well as that which is woollen, and it can be had of any substance, thin and fine for the commencement of the season in August, and thicker as the year advances.

A double-breasted waistcoat will not be without

its advantage, opening it as you ascend the mountain side, and closing it immediately you face the sharp cutting breeze at the top. From this practice I have derived much comfort, and prevented myself from catching many a severe cold ; the warmth is thus retained, and the perspiration not suddenly checked, as it might have been, had you encountered the icy cold wind without this protection to your chest—a part of the body which is at all times very susceptible of cold, but under such circumstances especially so.

Flannel waistcoats are so indispensable for health as well as comfort when taking strong exercise, especially in Scotland, that no sportsman should be so unwise as not to use them ; woollen stockings are also equally necessary ; these also may be had fine for the commencement of the season, although I am convinced the fine ones will soon be relinquished for the thicker and warmer ones, as the water on the damp mosses in the morning, and also late in the day, is sufficiently cold to be disagreeable with thin stockings ; and the thick stockings possess an advantage besides their warmth, in protecting the feet from being wrung or excoriated by the shooting boots, which is no uncommon occurrence at the beginning of the season, and to which you will be always subject with thin stockings, under strong made boots. The most comfortable boot for

walking and fagging in upon the hills is the common 'lace-up boot ;' when you once become accustomed to it, you will wear no other. It must be made by a man experienced in making shooting boots, and I have always found country makers better up to this work than London makers, and the price being about one-third of the London made ones. If boots be well made, of good leather, and the tongue properly attached in the inside, they will keep out the water for a long time, especially when they become old and seasoned, and have been previously dressed with some of the mixture made according to any of the receipts which will follow this article.

No new boots will ever keep out the water ; it is therefore advisable to have your shooting boots made in the summer, wear them if possible once or twice on a wet day, have them properly dried, then dressed and put away ; they will then be in good order for the 12th August. After boots have become wet, they ought to be dried gradually in the open air, not by the fire, and when perfectly dry then dressed. Let your boots be made wide in the sole, so that your foot may have sufficient room to expand, as it would be impossible to walk any distance without discomfort and pain with a narrow-soled or tight-fitting boot : be also particular as to length ; the pain produced by too short a boot during a long day's

fatigue would be almost beyond endurance. The fit over the instep may be exact, but not too tight.

If the small nails be of copper, the boots will be more durable, but the larger ones may be of iron, as it is absolutely necessary for safety to have large nails, both in the heel and the point of the boot, to prevent you from falling when passing over rocky places, with which almost every part of Scotland abounds. There is no security without them. I have occasionally had severe falls from the want of proper and a sufficient number of nails in my boots, and therefore can speak feelingly on the subject; but this occurred only on the first year of my visiting Scotland, for I subsequently never neglected this salutary precaution. The fall you receive is not an ordinary one, being amongst rocks, and as it generally happens on account of your feet slipping from under you, you may fall with your entire dead weight upon the edge of some rock, and may dislocate a joint, break a bone, or what is not uncommon, break the stock of your gun; or at all events receive a severe bruise or bruises. To save my gun on one occasion, on falling, I injured my left hand so much that I could not use it for several days; this was entirely owing to my boots being without large nails; partly cloth, and partly leather with buttons, are sometimes used, but I do not think they answer so well as the common lace-up boot,

as you cannot regulate the degree of tightness over the instep. A boot also made like an ordinary Wellington boot, only stronger and of thicker leather, is a very good boot for cover and 'battu' shooting, but will not answer for the hills, or for any hard work, as wrinkles are invariably formed in the instep, seriously interfering with your comfort, producing tenderness, then soreness, and finally excoriation. When this happens with any boot, there is no remedy like diachylon plaster, put on warm and kept firmly on with the hand till it is well attached, in which case it will generally remain till the inconvenience be entirely removed.

Some persons are more liable than others to suffer from the pressure and friction of boots at the commencement of the shooting season, especially in warm weather; I therefore recommend them to take a supply of this useful plaster with them. It is always advisable to apply moderately warm water to the feet after a day's shooting; some refrain from this comfortable practice, contending that it makes the feet tender and more liable to excoriation. I have found the reverse to be the case, as the warm water, by removing incipient inflammation arising from friction, prevents that soreness which precedes excoriation; but, notwithstanding the warm water, sometimes the feet at the commencement of your taking

strong exercise will become tender: under such circumstances, great relief will be derived from rubbing the feet well over in the morning, immediately before putting your stockings on, with either sweet oil, or with any kind of pomard; it will also operate as a preventive against excoriation.

To return from this digression on shooting boots to shooting garments. Having recommended woollen for the entire costume in Scotland, I must qualify such recommendation by restricting its use to the moors, as it would be altogether unsuitable for cover shooting; and as there is as good cover shooting in Scotland as in England, and perhaps, in many parts of it, better, or containing a greater variety of game, I will make a few suggestions on the subject of winter costume. The objection to woollen for the winter is simply because it could not withstand the briars, brambles, and blackthorn; in fact, in many covers a coat of woollen would be destroyed in one day, and trousers of the same material would share a similar fate: we must therefore have recourse to something stronger, and that is to be found in velveteens, cords, pluses, and fustians for coats, and moleskin and cord for trousers. Velveteen, I think, makes the most agreeable coat, and is not readily torn; it is, however, an uncomfortable one in wet weather, but covers ought

then to be avoided, as they can yield neither enjoyment nor sport.

Any colour is preferable to black in velveteens, inasmuch as the black dye is prejudicial to the strength of the stuff, and, moreover, comes out when it is wet, and discolours your shirt, which is decidedly an additional objection. If wear alone be consulted, there is nothing like plush for cover shooting, but this is rarely used in England, except by gamekeepers. I have seen it very commonly worn in France.

For trousers no material surpasses moleskin, if it be of first-rate quality: it will resist briars, furze, and blackthorn; in fact, no description of cover will tear it, and after it has been once washed it becomes soft, pliable, and most agreeable to wear. Cord also makes good trousers, but after it has been washed a few times is easily torn. Fustian and moleskin make good coats, as far as wear is concerned, but are disagreeable from their stiffness, and their appearance is also much against them. As far as colours are concerned for shooting coats, dark ones are no impediment to sport in covers; but on the moors, or in field shooting, I am persuaded your chance of approach is considerably diminished by dark colours, late in the season when the birds are wild. In all sorts of stalking the colour of your dress is of the greatest importance; but I reserve my remarks on this point till I come to the subject of stalking.

RECEIPTS FOR DRESSING BOOTS.

FIRST RECEIPT.

ONE pint of boiled linseed oil, half a pound of mutton suet, six ounces of clean bees-wax, and four ounces of rosin, to be melted over the fire, and well mixed. This, while warm—not so hot as may burn the leather, to be rubbed well in with the hand, the boots being perfectly clean and dry; the leather is left soft and pliant.

I have used this receipt for years, and prefer it to those which I subjoin, as it is more easily made. It is excellent as a preservative of the leather, and as good as any I have ever tried for keeping out the water. I extracted it, many years ago, from an American paper.

SECOND RECEIPT.

India rubber, cut fine . . .	4 oz.
Spirits of turpentine . . .	7 oz.
Bees-wax	2 oz.
Mutton suet	3 oz.
Linseed oil	$\frac{1}{2}$ pint.

Put the India rubber into a bottle with the spirits of turpentine; place it near the fire until dissolved, which may be three weeks; then add the other ingredients, they having been previously melted together over a slow fire. This must be well rubbed into the boots with a brush, the boots

*Tomes Receipt issued Oct. 20. 1866 in a letter
Bee's wax 3 vij. Linseed oil 3 vij. Hogs
lard 3 vij. Indian Rubber dissolved in
Coal naphtha as sold in the shops. 3 vij.*

and was already melted together. The whole to be raised to a melting temperature nor not higher than sufficient for perfect structure.

being perfectly dry and clean; twice a week will suffice, or once every third time after wearing them.

THIRD RECEIPT.

1 pint of linseed oil, boiled.

1 oz. of bees-wax.

$\frac{1}{2}$ oz. of Burgundy pitch.

2 oz. of spirits of turpentine.

Melt the three first ingredients over a slow fire in an earthen pot; *after* taking off the fire, add the turpentine. Rub this mixture well into the boots with the hand for a quarter of an hour (but a soft-haired brush will do), either before the fire or under a warm sun. In the first instance, let this operation be performed three times, at intervals, before wearing the boots; subsequently once a week will suffice, or three times a fortnight.

FOURTH RECEIPT.

Two oz. of India rubber, cut into pieces and dissolved in one pint of spirits of turpentine, to which is to be added one pint of linseed oil, two ounces of bees-wax, two ounces of Burgundy pitch, one table-spoonful of Venice turpentine, a little white lead, and a little lamp-black. The latter articles must all be boiled together before they are mixed with the dissolved India rubber. The mixture to be rubbed into the boots with a soft-haired brush once a week.

GROUSE SHOOTING—VARIETIES OF GROUSE
—GROUSE DISEASE—SETTERS AND
POINTERS.

GROUSE shooting has been called, and not inappropriately, the 'fox-hunting' of shooting, as it is as far superior to every other kind of shooting, as fox-hunting is to every other description of hunting. There is an excitement and fascination peculiar to this sport, arising from the wildness and beauty of the scenery, valleys, dingles, and dells, encompassed by irregular, rugged, rocky, precipitous mountains, possessing every variety of shape, form, and altitude, occasionally enhanced by contiguous sea and fresh-water lochs; and if there be a partial appearance of sterility and desolation, it is somewhat relieved by the numerous varieties of heather of different colour, shade, and hue, which luxuriate in every direction, on the tops, points, and sides of projecting rocks. This external and visible combination of circumstances produces a pleasing and agreeable sensation, which the monotonous, compact, and well-arranged fields of Norfolk and Suffolk can never afford, however well stocked with game they may be, besides offering a fine field for the display of the best qualities in the highest bred and best disciplined dogs, and putting the metal of the sportsman to the test; for to pursue this sport successfully, it

is required not only to have first-rate dogs, but to be an indefatigable walker, and to be able to use the gun skilfully. There is no sport more fatiguing, when well followed up, especially as the season advances; but very few out of the large proportion who visit the Highlands for grouse shooting remain beyond three weeks or a month, and therefore the majority are not aware of the greater pleasure and stronger excitement which this sport affords in the months of October and November. Then, of course, the number of head bagged will be very considerably reduced; but the superior quality and beauty of the birds, which are then in full feather, will more than make up for their reduced number, and being stronger and swifter on wing, and more difficult of access, are more worthy of the sportsman's labour, exertion, and skill, while the wild and rapid manner in which they rise causes an additional emotion, considerably enhancing the pleasure of bringing them down.

At the beginning of the season grouse lie close, rise near, and are very easily shot; and if the weather be warm, as it very frequently is in August, the difficulty is to make them rise; but it sometimes happens, if the birds be forward and strong on wing, and the season wet, they are wild even at the commencement—but this is rare.

The best mode of proceeding is to commence at the early part of the day on the outside of the

moors, and drive birds towards some favourite feeding-ground, leaving it quiet for the evening's sport ; and if you are successful in this respect, you will have as much shooting as you can desire. On first-rate moors, at the beginning of the season, this plan is unnecessary, as birds are sufficiently thick everywhere not to render any deviation from the beat requisite, but as the season advances, it may be resorted to with great advantage. It is important, previous to commencing operations, to direct your attention to the quarter from which the wind comes, and to regulate your movements so as not to drive the birds off the moors, as grouse, when disturbed, generally fly down wind, take long flights, and do not return, like partridges, the same evening, to the ground where they were bred, so that, if driven into an enemy's country, a serious loss may be the consequence.

If the wind comes from the north, it is advisable to go as far north-east or north-west as may be convenient, and beat the ground at right angles to the wind ; by continuing to quarter the ground thus, you not only give the wind to the dogs, but drive the birds towards the centre of the ground. But all these movements are relative, and must depend upon the size and extent of the moors. On a very large and extensive moor, well supplied with grouse, attention to this suggestion may perhaps not be so necessary ; but

on a small circumscribed one, where it is important to husband the coveys as much as possible, it cannot be disregarded or contravened with impunity. For instance, were you to commence beating the ground from the southern boundary, the wind blowing strong from the north, especially at an advanced period of the season, when the birds are wild and strong on wing, although you and your dogs might constantly advance, so as to ensure your being between the game and the boundary, the coveys, on being disturbed, would not be driven up wind, but would pass you on both sides down wind, and go off the ground, interfering with your immediate and prospective sport. Having remained in Scotland several winters, and shot on the moors till the end of the season, I can speak with some certainty on this point.

Without first-rate dogs little sport can be expected, particularly as the season advances.

Setters are peculiarly suitable for grousing, as they can do more work, undergo more fatigue, resist cold and wet better than pointers, are scarcely ever footsore or lame, whereas high-bred pointers are easily chafed by the heather, and are liable to sore feet and lameness. In very hot sultry weather, perhaps, pointers have the advantage; but the weather of late years has very rarely been such as would in any way interfere with the

working of setters upon the moors, in addition to there always being water at hand for them to drink when thirsty, there being no lack of either springs or burns; however, where a large kennel is kept, a mixture of pointers and setters will be found most advantageous.

Most young sportsmen are anxious to be out at daybreak, and in hot, sultry weather, it may not perhaps be a bad plan to shoot during the morning and afternoon, and rest a little in the middle of the day, but, generally speaking, it will be found more agreeable, and more conducive to sport, not to commence too early. During a long experience, I have never found that much was to be done very early in the morning. If you take your breakfast before starting, and are on your ground by eight, or even nine o'clock, you will have quite sufficient time, between those hours and six in the afternoon, to kill abundance of game, and you will have better sport and more enjoyment than if you had commenced as soon as it was light. There are two reasons which induce me to recommend eight or nine o'clock as the time for commencing operations, rather than at daybreak: in the first place, by allowing the grouse to remain undisturbed during their feeding-time in the morning, they will lie much better during the day; and, in the next place, you will escape that disagreeable sensation of languor, and

subsequent fatigue, which invariably assails every man who rises many hours before his usual time.

When grouse are wildest in the more advanced part of the season, they lie better in the afternoon, immediately after feeding, than at any other time of the day, and frequently more shots may be had from about sunset, as long as you can see, than could have been obtained during the entire day; hence the policy of always leaving some good feeding-ground quiet till the afternoon.

In making the above observations, I am, of course, assuming that, previous to your commencing operations on the 12th, the keepers are possessed of every information respecting the places where the broods of grouse have been hatched; and, if they have done their duty during the summer months, they ought not to be at fault in this respect, especially if they have acted judiciously by cultivating a friendly alliance with the shepherds, without whose aid, assistance, and good offices, all efforts at preservation would be abortive. The shepherds being on the ground at all seasons, and in all weathers, know all the places resorted to by the birds, the spots where the coveys are bred, and can give the earliest and best information as to the encroachment of poachers, or appearance of vermin. The nests are also almost entirely in their power, to be either protected or destroyed; it is therefore most impor-

tant to make friends of these men, and this should be done immediately on a moor being taken, by promising each shepherd a reward at the commencement of the season, on the condition of his affording every protection to the game in his power. I would rather have the shepherds friendly, without one keeper, than half a dozen of the best keepers, with the shepherds adverse. In some districts it is customary to give the shepherds one shilling per covey, but I do not think this is so good a plan as giving to each shepherd a fixed sum, whereby you avoid exciting jealousy, which might arise from giving one more than another; but this is merely a matter of opinion, and on this point each person will judge best for himself. I have known both plans adopted with success.

In the early part of the season, grouse take short flights and may easily be marked down, and even if not marked down, may be found again by following the line of their flight, till you reach the first turn in the mountain, within a hundred yards of which they will probably have dropped, near the top; if not there, you must try every adjacent corner and bend in the ground. They rarely drop on a flat, except it be a very extensive one, or on the summit of the mountain, except it be after having turned some corner: it is always as well to be prepared when you come in sight, by making your appearance over a top or round a side of the

hill, as there is no bird more quickly on wing and instantaneously off than a grouse. Sometimes they are very difficult to be found a second time, and baffle the utmost industry and perseverance. I have often been puzzled and unsuccessful, when I expected to have found them immediately, but the fact is they are very unequal in their flight, and sometimes go very great distances, and at others drop almost immediately on turning the first corner; in this respect much will depend upon the nature of the ground, independently of the weather. When the flats are extensive and the hills few, but large and lofty, I have generally found that grouse took very long flights, and became wild early in the season, especially if the flats are wet and spongy; but on the ground where the hills are small but numerous, and the flats restricted and dry, I have found grouse lie well constantly throughout the season, on fine and suitable days.

In wet weather grouse are equally wild everywhere, and I have always considered it worse than useless to go out then, as you not only disturb your ground without the chance of sport, but make your birds wild for a future day. In a very hilly country grouse take short flights, but as there are so many corners round which they may have turned and dropped, the sportsman's patience and perseverance are frequently put severely to

the test, before he finds the objects of his search. On many moors where grouse are abundant, following coveys is not resorted to, you pursue the beat fixed by the keeper, and have abundant sport; but as the season advances I am persuaded the most successful mode of proceeding is to follow your game, especially when it is marked down, even though a single bird, and on no account to relinquish the pursuit of a wounded bird so long as there is a chance of finding him. For your trouble and perseverance in this respect you will generally be well rewarded, in getting numerous unexpected shots, in addition to securing your wounded bird, and experience the satisfaction of having acted in a sportsmanlike manner. The same chances in your favour result from following coveys, as should you not succeed in breaking and dispersing the covey you are in pursuit of, you may find other birds; but in the event of success, you may secure every bird in the covey, especially if you have the good fortune to kill the old cock at the commencement, and this you ought always endeavour to do 'per fas aut nefas,' as he will frequently show his head above the heather as he is running off, with a view of leading you away from the young birds. If you avail yourself of this opportunity, you may secure the remainder of the covey, whereas, had you allowed him to escape, you might not have seen

either him or the pack again during the day, or if you had, it would have been only after considerable trouble and extra walking.

On a dry, frosty day, especially if the frost be a black one and the sun be out, wonderful sport may be had, as many coveys and single birds will be found to lie as well as at the commencement of the season. The more frequently the beat can be changed the better; twice a week is sufficiently often to go over the same ground, as grouse become not only very wild if constantly disturbed, but will leave their ground.

With regard to lunch, biscuits and sandwiches ought to suffice, with cold tea or wine and water for liquid. Spirits of all sorts ought to be scrupulously avoided, especially the raw Highland whisky, than which no liquid is more prejudicial, if you are desirous of shooting well; it produces a feverish, unquenchable thirst, which no amount of liquid can either satisfy or allay. 'Obsta principiis;' resist the first inducement which presents itself in the shape of a clear rivulet or cool spring, and you may then be able to persevere till lunch-time; but if, on the other hand, you yield to the first temptation, and merely 'take the chill off' the cold water with a little whisky, you will then be obliged to persevere throughout the day, as thirst under such circumstances and influences 'vires acquirit eundo,' and the remedy frequently

indulged, will not only produce discomfort, but eventually bad shooting. Sometimes bad shots shoot well for a time under the influence of a powerful stimulant; but when the reaction takes place, there is generally a lamentable falling off, and this is sometimes the case with good shots who have resorted too freely to an injurious stimulant.

In fact, the effect of spirit-drinking on the nervous system and on the constitution generally, when persisted in regularly and continuously, is of so decided and marked a character, that sportsmen who are victims of this baneful habit, from having been first-rate shots, gradually descend to the rank of second-rate performers; always variable in their shooting; never certain of the easiest shot—shooting brilliantly during some portions of the day, at others wretchedly, and these inevitable results are mostly accompanied by a gradual decline of health. Having on many occasions witnessed the lamentable consequences of this pernicious habit, I venture to entreat all young sportsmen to beware of the approach of the insidious enemy, to resist him ‘in limine,’ as the decided foe to all sport and enjoyment.

The habit of resorting to any stimulant is easily contracted, but is with difficulty abandoned; indeed, I have never known an instance (and many have fallen beneath my immediate observation) of

spirit-drinking being abandoned when it had once become a confirmed habit and practice, till death closed the scene, preceded by attacks of delirium tremens ; of course several years elapse before this terrible climax is arrived at, but come it must, and with such rapid advances, and with such inevitable certainty, that the scene closes just when the prime of life would have been reached.

There are persons who tell you that the Scotch climate requires whisky, that there is something in the atmosphere of that country which enables those who visit it to imbibe with impunity a quantity of alcohol which would be most injurious in England. This is a great delusion ; and even if it were only partially so, the risk of the practice being subsequently continued and confirmed into a habit, ought to operate as a warning to resist the first approach of so insidious and dangerous an enemy. Spirits are unnecessary except in certain cases of sudden indisposition, when they may be *used* with the greatest advantage, especially cognac of the first quality ; and no sportsman visiting the Highlands, if he can afford it, ought ever to be without this invaluable specific. When used, it is a friend ; when abused, a terrible enemy.

For the purpose of quenching thirst when induced by strong exercise, few liquids are better than weak wine and water, or cold tea with a small quantity of cognac in it—beer, especially if it be

strong, although it may allay thirst for the moment, subsequently increases it—it adds fuel to fire, under the influence of heat and strong exercise. A quart-bottle of cold tea, with a table-spoonful of cognac, ought to be a sufficient quantity of liquid for a day's use; but the smaller the quantity of liquid the sportsman imbibes, of any sort, the better he will feel, walk, and shoot, and the more he will enjoy his dinner after the sport be over.

It requires but little firmness to resist the first temptation to drink whisky-and-water, but it is most difficult to resist this insidious form of potation when it has once become a habit to that extent, that a well-filled flask is always carried in the pocket; to resort to it frequently under the solicitation of thirst is the natural and inevitable consequence of the means of relief and gratification being so near at hand, and the well-filled flask is soon a necessity, and the enemy destined to undermine the constitution and destroy health becomes the inseparable companion; and the sportsman who thus yields to a pernicious influence lays up for himself a certain store of future care and painful anxiety.

*‘Et servare sibi curam, et certum dolorem,
Ulcus enim vivescit, et inveterascit alendo.’*

I insist strongly and earnestly on the importance of resisting all temptation to contract a baneful

habit, because within the last few years several painful instances of premature death of persons who had scarcely reached the prime of life, in consequence of spirit-drinking, have fallen beneath my own immediate observation ; and in each case the victims were well-built, strong, and naturally healthy men, as calculated to attain longevity as any men I ever met with. In each case death ensued from atrophy, the capacity to take sufficient food to support the body having been destroyed. From first to last I have passed at least twelve years in Scotland, having on the last occasion of my visit there remained eight consecutive years, winter and summer, and never found that, in consequence of the climate, there was a necessity for drinking whisky. I never took it out with me shooting, and rarely drank any at other times, and found I could get on very well without it—in fact, much better without it than with it: a slight repast about the middle of the day, washed down by a little weak wine and water, is all that is required ; the body is much more capable of enduring great fatigue under the influence of moderate support during the hours of exertion, than when an attempt to sustain it is made by a solid repast, washed copiously down by stimulants. The results of such a lunch I have generally observed to be a decrease of physical elasticity, disinclination to exertion, and indifferent shooting.

The preceding suggestions which I have ventured to submit will, I trust, be received by the young sportsman with the same sentiment and in the same spirit with which they are offered ; they are intended for his benefit and advantage, and he will do well to attend to them.

There can be no great enjoyment, especially for the keen and sanguine sportsman, without good health ; and as all excesses, especially those which are of themselves of an injurious character, tend to undermine the constitution and destroy health, if he is wise and consults his own happiness he will scrupulously avoid them in all things : and the rule of his life will be moderation—

*'Est modus in rebus, sunt certi denique fines,
Quos ultra citraque nequit consistere rectum.'*

This rule applies even to over-fatigue, as many sportsmen have found to their cost and annoyance. Working too hard and taking too much out of a sportsman's physical energy, by walking too fast or too long, has often the effect of weakening the digestive organs, the consequence of which is restlessness at night, instead of sound refreshing sleep, and on the following day lassitude, nervousness, and bad shooting. Those who have over-fatigued themselves, know pretty well the effect which is produced on the nerves by this pardonable excess—of which, I must admit, I have been too frequently guilty, and paid the penalty. In my

younger days when I was passionately fond of shooting, and in the habit of being out all day, and mostly shooting every day, I always found when circumstances prevented my going out, and I only shot alternate days, that I shot infinitely better. Too much fatigue unstrings the nerves, in which case neither hand nor eye can be in first-rate order.

VARIETIES OF GROUSE.

ON some hills in Argyleshire, over which I shot during the last five or six years I was in Scotland, which were parallel with the Sound of Jura, and consequently immediately opposite to that island, few grouse were bred, but about the end of the month of September or beginning of October in each year, with the first heavy gale of wind, from ten to twelve (and sometimes more) large coveys of grouse arrived, small in size and of peculiar plumage, tamer, and much easier of access than grouse generally are at that season of the year; so that I used to have good sport with them, in a small way, from the time of their arrival till the 10th of December, as there were continuously fresh packs arriving at intervals throughout the winter; so much so, that I frequently found as many and

sometimes more in December than at the commencement of October. Whence they came I was never able to ascertain, but suppose they migrated from some hills far north on which there was little food for them. On my hills the supply of young, green, tender heather was always abundant, as a quantity of old heather was burnt regularly every year, generally in March ; and as the frost was not so severe as in the north, and the hills were never covered with snow in the spring of the year, there was no impediment to the annual growth of the heather. The weight of these grouse seldom exceeded $1\frac{1}{2}$ lb. ; their heads were remarkably small, their plumage yellowish, in some respects similar to that of the golden plover, their breasts thickly spotted with white. There was no visible difference in the size, shape, or plumage of the males and females, whereas in the ordinary grouse the male birds are large, weighing sometimes as much as 2 lbs., some of them being of a decidedly red plumage, others so very dark as almost to be considered black; indeed, on wing, they appear as if they were black. Although naturalists divide grouse into two classes—the red and black, meaning by the latter black game, I am quite convinced from my own observation and experience that there are three distinct kinds or varieties of what are usually termed red grouse ; of course all three of the same genus, but varieties as far as

size, weight, and plumage are concerned. Some persons are of opinion that these were young birds, driven away from their native hills by the older birds ; but this, I think, is a mistake, as I had some of the smallest of them cooked, and received undoubted evidence of their age from their extreme toughness.

The red and black cock-birds, which I have represented as weighing 2 lbs., are seldom good for the table, being generally very old ones.

I will now venture to make a few remarks on the grouse disease, as it still appears to be a problem, although some sportsmen suppose they have solved it. Some insist that it comes regularly in cycles of five or six years, without any particular assignable cause. From this doctrine I dissent for two reasons: the first, because on hills over which I shot for eight years I never met with one diseased bird ; and secondly, because I believe where it has exhibited itself, there has been a particular and direct cause for its appearance. Some attribute the disease to the pollution of the heather by the dressing used for sheep: this, I conceive, also to be a mistake ; because to my own certain knowledge, on a very large deer forest, on which no sheep of any kind are ever allowed to intrude, the disease on particular years has been as violent as on any moors frequented by sheep. The years on which disease has frequently made

its appearance have been those which have succeeded very long and protracted winters, when the snow has remained so long on the heather that it has never bloomed, consequently produced no young shoots, and the same severity of weather has exercised its influence over the incipient shoots of the former year, so that no green, moist, wholesome food was to be found, nothing but old, dry, hard heather, void of sap ; and as hundreds of diseased birds after these winters have been picked up, either in a dying state, or dead with their crops full of undigested heather, and their livers perfectly black, it is not unreasonable to assume that bad food had something to do with the malady. Cause and effect seem here to be pretty closely connected. On the hills over which I shot on the west coast of Scotland, there is always an abundant supply of green heather, the weather during the winter months being seldom very severe, and, owing to the influence of the sea-air, the snow seldom lies long, never so late in the spring as to prevent the growth of the heather ; consequently there is always a supply of wholesome food for grouse, and to this circumstance I attribute the absence of disease. Most of the proprietors of extensive moorland, who have given their attention to this subject, seem to have arrived at the conclusion that burning quantities of heather, regularly in slips every year, is necessary for the

healthy preservation of grouse; and I am convinced they are right. Grouse cannot be healthy without a sufficient supply of their natural food—young green heather; in addition to this they eat berries of various kinds, and at a particular season of the year, sometimes descend to the corn-fields in large packs, where they are easily victimised in large numbers by poachers and by sportsmen, who are similarly unscrupulous.

The peculiar fine flavour characteristic of a grouse in first-rate condition is considerably impaired when he abandons his natural food, the green juicy heather, and eats the hard dry corn—in fact the change of food has even an effect on his external appearance, which is easily recognised by the poulters of the north, who refuse to give the same price for those grouse which they designate as 'corn birds,' as they give for the heather-fed birds—and this would not be the case if there were not a decided difference in the quality of the two birds, as well as in the external appearance of them; but the fact is they are not so saleable to the consumer, as the flesh is found to be whitish, hard, and dry, whereas the flesh of a healthy well-conditioned heather-fed bird is brown, tender, and juicy; and for the guidance of those who are particular in these matters, I can safely assure them, that when the former appearances are manifest the bird in question is either corn-fed or partially dis-

eased, and not good or wholesome food. The external appearances of a diseased grouse are dulness of plumage, absence of plumpness, and a sharp, partially projecting breast-bone.

ARRANGEMENTS

**NECESSARY TO BE MADE PRIOR TO THE 12TH OF AUGUST,
FOR THE SAFE AND INEXPENSIVE TRANSMISSION OF
GAME TO ENGLAND.**

REMARKS

**ON PACKING GAME, AND ON THE ATTENTION TO IT, WHICH
IS REQUIRED PREVIOUS TO PACKING, WITH OTHER
MINOR PARTICULARS.**

DURING many years' residence in Scotland, having had a considerable amount of game at my disposition, the greater part of which I was in the habit of sending to England, I am induced, for the benefit of those who may be similarly circumstanced, to communicate the results of my experience as to the mode of transmission, as the great distance and consequent expense render the subject worthy of some attention.

The charge by rail for game-boxes is by weight; consequently one of the objects of the sportsman's anxiety is to secure boxes of as little weight as is consistent with safe transmission. This was my

principal object, and I believe I attained it by resorting to the following means: the results of which were—boxes of an average cost to myself of 6*d.* each, and of 3*s.* 6*d.* and 4*s.* carriage to my friend, of those containing four and five brace of grouse. The planks were purchased from a saw mill in the vicinity of my residence early in the spring, and kept in a dry place under cover, where there was a free circulation of air, till they were perfectly dry and fit for use, when a carpenter's skill was brought into action for the purpose of converting the raw material into three, four, and five-brace boxes. The planks were of different dimensions. Some thirteen inches broad, and a quarter of an inch thick, for the tops of the boxes ; of the same breadth for the bottom, but three-eighths of an inch in thickness ; for the sides, the plank was half an inch thick, some four inches and some six inches in width.

The sides of the boxes must necessarily be thicker and stronger than the tops and bottoms, as they receive all the nails. For grouse, woodcocks, and partridges, boxes four inches deep will suffice ; six inches in depth will be required for black game and pheasants. The friend who receives four brace of grouse at an expense of 3*s.* 6*d.* has no just right to complain ; but when the carriage reaches double that amount, sometimes even more, which is frequently the case when no attention has been paid to the description of box used, it having

been made of raw undried wood, of unsuitable demensions in every way, the recipient party is not so well pleased.

I have frequently seen boxes, the component parts of which were all of similar thickness, nearly an inch thick, if not quite as much ; the box consequently weighing twice as much as the boxes made according to the proportions which I recommend, and being charged double. Boxes fifteen inches in length and four in depth, will carry three brace of grouse, or four of partridge, and four of woodcock. In packing, the birds should be placed with the feet towards each other, each bird being wrapped up in dry paper, with some powdered charcoal under the wings and in the mouth, and some sprinkled all over the top of the birds, with some few bits of the same. During the summer months I was in the habit of purchasing a sack of charcoal, which sufficed for the use of the sporting season. I generally mixed a little pepper with the powdered charcoal. All birds intended to be sent away ought to be perfectly dry, clean, and cool, before they are packed, hence the necessity of directing some attention to game immediately after it is killed. Grouse ought either to be carried by the hand, or on a game stick, or hung up in a large basket for the purpose, carried by a pony, till perfectly dry and cool. When put into a game-bag, or thrown into a basket one upon

another, they soon become heated, are easily spoiled, and quite unfit to be sent away to any distance.

Birds packed up warm and sent to a distance would be totally unfit for use on reaching their destination, or even if not warm, if packed indiscriminately and crowded one closely upon the other.

No one bird ought ever to lie upon another. Some persons use hops in packing, which answer the purpose well; but charcoal is much cheaper, and I think somewhat better, as it can be introduced in the mouths of the birds, after the blood has been removed, if there be any. Some care of game after it is brought home is also very necessary in the warm weather of August and September.

The larder in which it is kept ought to be well ventilated, and, if possible, facing the north, the windows and all apertures securely covered with small wire net-work, sufficiently fine to exclude all flies, as in the event of a few blue-bottle flies obtaining entrance, any quantity of grouse, however numerous, would, in one single night, be entirely spoilt, as the eggs deposited by the flies under the wings and elsewhere would soon become maggots, which would render the contents of the box a mass of corruption before it reached London. The person who packs game should have a small hammer, a brad-awl, and a quantity of brads of the right size, as from the thinness of the sides of the box as well as of the top, when the

dimensions I have recommended are used, splitting of both the top and the sides would be inevitable, if either too strong nails were driven in, or the brads used without the previous perforation of the bradawl.

A box of slender dimensions, when properly fastened down by brads, is much more secure from irruption by railway porters, than a strong box fastened by heavy nails. Small tacks must be used for fastening on the addresses, as there must be two for security, one on the top of the box and another on the side ; as it frequently happens that the top address is torn off, by the removal of a heavy package which has been improperly placed on the top of game-boxes. As the lid or top of the game-box is only a quarter of an inch in thickness, the address must be nailed on it before it is placed on the box, allowing it to rest on something solid at the time of driving the tacks through ; this operation could not be performed afterwards, as the lid would yield to the blow of the hammer without receiving the nails, a risk of splitting it being at the same time incurred. The contents of the box ought always to be written on the card, and the box booked at the steam or railway company's office.

If sent by goods train, the cost of carriage will be considerably reduced, and in cold weather this medium of conveyance is sufficiently expeditious

but not during the sultry weather of August, as there is frequently a considerable delay in the delivery, and moreover, at all times small parcels by the goods train incur the risk of rough handling, as well as of delay.

BLACK GAME.

BLACK game is very inferior to grouse shooting, and only affords a few days' first-rate sport, as there are few districts which admit of its being followed continuously except as subsidiary to other shooting; it varies much according to the nature of the country, success depending more on a favourable disposition of the ground, than on the quantity of the game. If there be high mountains contiguous to the ground where black game are bred, your sport will be of short continuance, as on being disturbed and shot at a few times, they take up their abode on the tops of the mountains, soon congregate, and become very difficult of access, except by stalking at daybreak and at sunset, when they descend to the corn-fields; but if there be no high mountains, and the country be merely hilly, with a few small covers and brushwood, then sport may be had to a certain extent on every fine day till the end of the season. In

August, before they have been disturbed, they will be found on the open heather, generally in the bottoms, where there is a mixture of rushes, these being favourite breeding-places, or in the brushwood or thick heather contiguous to the oat-fields, and they lie so close, that with a good dog you may frequently kill every bird in the covey: the old hen is almost always found with the young birds, and is generally the first to rise. After a few days, most of the broods leave the open heather and descend to the immediate vicinity of the oat-fields, especially if the oats are ripe, attracted thither from a distance of many miles, and frequently crossing an arm of the sea or wide water loch of more than a mile in breadth. So long as the corn remains standing, or is in stood, i.e. in sheaves, black game may be found in the adjacent covers, and be easily approached; but after the corn is carried, they become more wary, roam about, are more dispersed, and are more difficult of access; it will be then necessary to exercise caution in approaching them, and to advance as quietly and carefully as possible.

One dog will suffice, and he ought to be remarkably good and staunch—an old, close-hunting pointer, who will not go out of gun-shot, and a good retriever will be all that you will require. Avoid speaking to, or calling your dog, or whistling, as any of these operations disturb black

game more than firing your gun off. At this period of the season two or three brace of black game must be considered a good day's sport—in addition to whatever other game you may meet with to fill up the bag—and this quantity may be secured on every fine day with good management till the end of October, and occasionally in November on a fine, dry, frosty day. It is worse than useless going out on a wet or bad day, especially if the wind be high, as you will not only have no sport, but diminish your chance of success for the next favourable day. Avoid as much as possible going down wind when you are approaching any favourite spots: attention to this I have found from experience to be important.

A great quantity of black game may be killed by stalking morning and evening before the oats are carried, and as the seasons are generally late in Scotland, the stooks, i.e. sheaves, sometimes remain out till the middle of October; upon and about these, black game may be seen in abundance, two or three may sometimes be killed at a shot, provided the field is so situated that you may approach unseen under cover of some rock or other inequality of the surface. But I prefer the legitimate and more sportsmanlike mode of killing them, which may always be pursued on a fine day with success with a good dog, if there be cover of any description, capable of affording

them temporary shelter—long grass or fern will sometimes suffice, if the day be fine and dry; of course you cannot kill so many as by stalking, especially of the old cocks, but they occasionally lie close, and are sometimes taken by surprise. The young birds, when isolated, will generally lie to a point throughout the season, when found either in thick heather or in brushwood; but generally speaking, after the first month black game pack, and when one rises the rest follow; but as in covers they are sometimes dispersed, it is always a good plan, when you see one bird rise out of shot, to advance as speedily as possible, in case there should be others not far distant.

At the beginning of the season black game cannot easily be driven out of a cover by beaters without the assistance of one or two dogs, as they will lie till they are almost trod upon. The best dogs for this purpose are close-hunting, steady, mute spaniels; they will be sure to find every head of game in the cover; but they must be well under command, and broken from chasing, otherwise they will do more harm than good. In the first month of black game shooting I have had better sport with spaniels than I have ever had with either pointers or setters; the latter cannot find half the birds in very warm, sunny weather, especially when they drop in thick brambles and bushes, and spaniels will find every single bird.

It is of course indispensable that your spaniels down charge, but as they will frequently flush several birds when a number are found together, before they perform this act of obedience, several shots may be lost, which would not have been the case with pointers ; they will however very soon repair this temporary disappointment, by finding all the birds again, if you can mark them down, no matter where they may drop, where pointers or setters would have failed.

Some patience is requisite with spaniels ; they must not be hurried, and not only be allowed time to hunt their ground closely, but encouraged to do so ; it will be necessary for the sportsman to be vigilant, and have his eye continually on them, so as to know immediately when they come on game, and keep up with them as they advance. It is a little more fatiguing, and at the same time more exciting than with pointers ; but you get a great many more shots, although many of them may be at a greater distance and more difficult. I am however persuaded that the man who is a keen sportsman, and a good shot, will kill one-third more with spaniels than with pointers during the first month ; in fact, so long as black game lie well : the reverse will be the case as soon as they become wild and difficult of access ; the bustling spaniel must then be discarded, and the steady pointer adopted — but even the

pointer must not be allowed to go out of gun-shot. Always avoid as much as possible showing yourself on the tops or on any rising ground unless you have previously beaten the ground below which the tops command, as those birds which are on the look out would instantly perceive you, and immediately move off. Invariably advance towards any favourite spots from below, and never from above, always going round any elevated ground rather than over it. Black game are easily stalked; and for a sitting shot, I have found no charge equal to one of Ely's wire cartridges—loose shot is useless beyond 35 yards. You may pick up plenty of feathers, but the birds will fly away.

PTARMIGAN SHOOTING.

PTARMIGAN give little or no sport, and are generally, I should imagine, pursued more as a matter of curiosity than for sport. For the table, they are very inferior to grouse. They are only to be found on the tops of very high, rocky mountains, are generally very tame, and will allow you to get sufficiently near to have one shot sitting and another as they take their flight from the ledge of the rocks on which you will find them perched.

As their colour so nearly resembles that of the rocks, or large stones, on which they are sitting, they are not so readily seen as might be expected, although within the ordinary range of sight. A sitting shot is frequently the only chance that presents itself, as they may be out of sight the moment they leave the edge of the rock on which you may perceive them; they, however, fly but short distances, so that by following them up, if there be any quantity on the mountain, you may fill your game-bag; but you will find it rather hard work, as these birds never leave the rocky part of the mountain, and the walking will necessarily be very rough and bad, and you must make up your mind to a fall or two.

I recollect, some few years ago, when in Inverness-shire, accompanying some friends to a high mountain expressly for the purpose of shooting ptarmigan. It was in the month of September; the morning was very fine. As we were on ground abounding with game, we killed grouse and black game before reaching the mountain, and saw several roebuck; but as a climax to this commencement, on arriving at the base of the mountain, we saw five large red deer taking their departure, and winding their way round the side of the mountain, and immediately above them two immense eagles hovering; but they soon disappeared with the deer, and we commenced our

ascent, by no means an easy task, difficulties increasing with our progress. It really appeared an endless job, what with the acclivity and the height, which was so very much beyond what we expected from our estimate of the distance at first sight. In fact, the surface of a high mountain is as deceptive as that of a large sea-water-loch, when you look at it from the shore, and try it afterwards with a pair of oars. We, however, accomplished our task by reaching the summit, and very soon found some ptarmigan ; but we had no sooner commenced shooting than a thick mist came on, immediately succeeded by a most copious fall of rain, so that we could only kill a few brace, and before we could reach the bottom, and get access to our Mackintoshes, which we had left there with our ponies and game-baskets, we were well soaked ; but this was a very common occurrence, almost a daily one, as it rained almost every day, and the finest and most cloudless morning was no guarantee for the remainder of the day being fine.

A singular circumstance occurred on our reaching our game-baskets, rather reversing the spirit of the old adage, 'Catch a weasel asleep.' The game-panniers had been removed from the ponies' backs and placed on the ground, so as to allow the ponies to feed at liberty till our return. One of the gillies, on replacing his pannier, happened

to raise the lid, and discovered that a weasel, attracted no doubt by the savoury smell of the grouse, had managed to raise the lid and get into the basket, without being able to effect his escape. His fate was of course, immediately on our return home, decided by the terriers—so much for the termination of this day's sport.

PARTRIDGE SHOOTING.

AFTER grouse shooting, the pursuit of partridges becomes very tame work, more especially in those counties in England where these birds abound to such an extent, that one large turnip-field will furnish a day's sport to a party of six or more guns, the surrounding stubbles having been previously driven for this purpose. Boys, or a man on a pony, with a brace of wild spaniels, may be employed. I have known as many as eighty brace of partridges killed in one turnip-field in this manner, the field being extensive and the turnips close and thick, and the day exactly suitable. There were six guns; no dogs, except one or two retrievers. The field was walked over or beaten three times during the day. After the second beat the party took lunch; the last beat was the most productive. The guns were at regular dis-

tances from each other, keepers and game carriers walking between them. The success of this sort of shooting depends upon method, regularity, and order. The line must be rigidly kept, and after the discharge of even one shot, the party must halt until the gun be reloaded, and when 'all right' is pronounced, may advance, the keepers picking up the birds as they proceed.

This sport is generally commenced between 10 and 11 o'clock, it being found, as in grouse shooting, adverse to good and successful sport to disturb the birds before they have finished feeding, and the dew be off. And, moreover, between the hours of 10 and 6, there is abundance of time to satisfy any reasonable appetite for shooting, and to make an excellent bag. If the day be fine and dry, the dew off, and you use dogs, the birds, when found and shot at in the stubbles, will immediately fly to and drop in the first thick piece of clover or turnips, or thick hedgerow, whereas, had you found them at daybreak, they would have dropped on some bare place and taken a second flight.

It is difficult to give precise instructions as to partridge shooting, as they of necessity must be relative to the country in which it is pursued. In Suffolk and Norfolk, where partridges are most numerous, and turnip-fields abound, it may be pursued without the use of either pointer or setter,

merely by having the stubbles driven; but, to my taste, shooting loses the greater part of its charm without the use of dogs. It must, however, on the other hand, be admitted, that to those who are fond of having a number of shots, without much fatigue, and are indifferent as to using dogs, that there are no counties like Suffolk and Norfolk for this description of shooting. One hundred and ten brace of partridges were once killed by one gun in one day. The ground selected was the best in the county, and the shot, Sir R. S., admitted to be first-rate.

The contiguous county, Cambridgeshire, is almost as good. From Newmarket to Thetford, there is a vast extent of country abounding in game, and particularly partridges, the soil being exactly suitable for breeding, and also abounding in every variety of food, and birds are so numerous, that the only difficulty is to keep them down by fair shooting; but all counties are not so fortunate in this respect, and the difficulty in too many is the other way, in which case the sportsman must be satisfied with a few brace, and to obtain them, have good dogs, be an excellent walker, good shot, and skilful in his tactics. But I am inclined to believe that the man who can kill with a brace of good dogs his twelve or fifteen brace over a wild, unpreserved country, will enjoy his sport much more, in the variety afforded him by

the different sort of ground which he will go over, and the excitement and pleasure, when his dogs make their first point at a long-searched-for covey, and as they subsequently draw after single dispersed birds, will be considerably greater than that which he will experience who can kill three times the number without the use of dogs.

In a wild country, where birds are scarce, the first difficulty is to find the covey. The primary object, when you have succeeded in this respect, ought to be to kill the old birds, and drive the others in the direction of some good lying, such as clover, turnips, furze, or whatever the contiguous land may afford in the shape of cover; if your dogs are good, and you manage well, you ought to get the greater part of the covey; if, however, you are shooting over ground where birds are scarce, and you are desirous of increasing your stock, never on any account kill any covey down, always leave at least four birds.

In partridge shooting, always give your dogs the wind as much as possible, and as this principle is important as to the success of your day's sport, it ought to be attended to in the morning before starting, so as to regulate your beat during the day; a great deal frequently depends upon your entering a field from the right quarter; a good marker is very requisite, two if you can have them, as single birds at the beginning of the season lie

very close, and are easily passed by the best of dogs. The best shot is No. 7, to commence with, and, as the season advances, No. 6, but never larger — some use 5, and even 4, which in my opinion is a very great mistake; you will wound and destroy more birds with large shot, but you will bag more with small without wounding others, and be more satisfied with your shooting.

Partridges are very easy birds to kill, their flight being steady and regular; if a covey rises within tolerable distance, there is always time for the effective discharge of both your barrels without any hurry; in fact, at the commencement of the season birds rise so very close that you are obliged to wait till they are at a proper distance. Nothing, in my opinion, is more unsportsmanlike than to kill your birds too close, so that they are not fit to be carried home.

When birds are going straight away from you, they are generally on the rise, especially if they are approaching a hedge, therefore take good care not to shoot under, and when you have a cross shot, shoot at least a foot before your bird. As the season advances, and birds become strong on wing, and difficult of access, always follow your birds, and endeavour to break your coveys, by which means you will be more likely to have sport than if you went continually in pursuit of fresh coveys. I have shot much in wild countries

where birds were not over plentiful, and I always made it a rule to follow birds as long as I had a chance of finding them, and found this plan answer. When partridges are wildest they will generally lie close, if you can disperse them and drive them into cover. I have even known them lie till nearly trod upon in a rough fallow. If a large covey rises at a distance, off a bare place, when the season is advanced, it is sometimes good policy to fire at them, although out of shot, as, if not shot at, they will in all probability drop on a bare place, again commence running, and, as you approach, get up a second time out of distance, whereas had you fired a shot, they would have dropped in cover of some sort, and allowed you to get tolerably near them, when you would do well to fire both barrels if you have the slightest chance, as after this they will be sure to lie better.

On a dry day, with a slight breeze, even in December, a good shot and good walker, who will persevere and follow up his birds in a country where there is any tolerable cover, either in the shape of turnips, furze-fields, or hedge-rows, will be certain of sport ; whereas few shots could only be had by not deviating from your beat, and continually advancing in pursuit of fresh coveys.

REARING PARTRIDGES FROM EGGS.

If you can get eggs, partridges are easily raised under hens. A particular sort of hen (the bantam) has been specially recommended, but I have found the ordinary one answer every purpose. Having a number of these at your disposal in the different farmyards in the neighbourhood, the partridges' eggs must be placed under them when they are sitting, and their own eggs withdrawn, and this can be easily done, without in the slightest degree alarming the hens, by the farm-servant who is in the habit of attending upon and feeding the poultry. Whenever the bird leaves the nest, a few days before hatching, it will be as well to sprinkle warm milk-and-water on the eggs. As soon as the birds are hatched, or perhaps on the following day, if it can be conveniently postponed, as the young birds do not partake of any food under twenty-four hours, but derive all their support from the warmth imparted under the wings of the mother, they must be placed under a coop, with the old bird: this coop must have been constructed expressly, having a bottom to it, and small intervals in front through which the young birds can pass; to this, however, there must be a second coop attached, with open work, covered with netting, affording space for them to run about. After a few days, when the young birds

become accustomed to the spot, the netting from the outer coop may be removed during the day, but replaced at night as a protection from vermin. The best place to have your coops is in an old kitchen-garden, walled in, as in this they will be more secure, and finding plenty of food, more readily learn to take care of themselves. In the first instance, you must feed them with eggs boiled hard, chopped up with cress, and with an abundant supply of ants' eggs: the latter is the best food you can give them.

Select a good aspect for your coops, so that the birds may have the benefit of the morning and midday sun, and be sheltered from the north winds. The young birds require great attention, and must be fed regularly three or four times a day: each bird will require about one egg daily. If the weather be wet and cold, they will be very liable to a disease called the pip, and will require extra care and immediate attention, as they soon succumb to the first attacks of the malady if it be not counteracted, and these exhibit themselves by the bird gasping for breath as if he were nearly suffocated, accompanied by weakness, so that in attempting to walk he falls down. Something of a stimulating character I have known afford instant relief and save the bird: three-fourths black pepper and one-fourth mustard, mixed together with a little butter, and made into small pills, and

one pill given daily to each bird. Even if the birds be quite well, but the weather wet, one of these pills given on alternate days will be beneficial, acting as a preventive. It will be much better to have the coops upon some gravelly ground than upon turf; if near to some groundsel and lettuce, so much the better. Pheasants can be reared in the same manner. Curds are also a good and safe food for young birds, but the staple food must be ants' eggs.

Young pheasants are also subject to a disease called the gapes; this may be cured by the same remedy as the pip. The coops of both partridge and pheasant ought to be moved every morning; if they be placed on the grass, it ought to be mowed short, and they ought not to be let out of their coops till the dew be off. Little heaps of gravel should be made for them to roll themselves in. No water should be given till they are a month old, and then some saffron must always be put in it. As the birds become strong, boiled rice may be given in addition to their other food, especially if it be observed that they have diarrhoea, to which they are sometimes subject. Should rice fail in stopping it, some alum may be boiled with it. Should it not be possible to procure a sufficient supply of ants' eggs, then maggots, or the larvæ of wasps, may be used. The former may be procured from horse-flesh or bullock's liver,

hung up in a warm place under trees, with a tub underneath, with bran in it, to receive them. The larvæ, if not wanted for immediate use, must be baked to keep them serviceable, and prevent their arriving at maturity.

PHEASANT SHOOTING.

IN former days, when game was not so abundant, nor so highly preserved as at the present time, spaniels were generally in use for pheasant shooting; and in a country where the fields were small and surrounded by thick hedgerows and shaws, spaniels afforded excellent sport to two guns, one being on either side of the fence, especially where there was a mixture of game. With two brace of good spaniels, and one good beater, the widest hedgerow or shaw will be thoroughly ransacked, and every head of game forced out either on one side or the other; and as these lively and excitable little dogs are bustling about and giving tongue, the sportsman is kept in a continual state of pleasurable excitement, as to what kind of game is to succeed that which has just made its appearance; and as all sorts of game resort to hedgerows and shaws, they become a sort of sporting lottery, from which in addition to

pheasants, partridges, hares, and rabbits, an extra and unexpected prize, in the shape of a woodcock, may frequently be secured. In fact, in the winter, when the leaf is off, I don't know of prettier or more amusing sport than hedgerow and shaw shooting, with two brace of spaniels and a brother sportsman, in a country not overstocked with game, but where there is a slight sprinkling of everything, so that, with good shooting and a little fagging, a tolerable bag may be made. But this sort of old-fashioned shooting, which I partook of constantly in my younger days, and remember with pleasure, is now superseded by a different style of proceeding, consequent on the new and extensive system of preservation of game, but especially of pheasants.

In former days, if two guns killed their five or six brace of pheasants, with a mixture of partridges, hares, rabbits, and two or three woodcocks, the sport was considered most satisfactory; but now pheasants are all reserved for one or two great days, and if two or three hundred are not killed, 'the battue' is thought nothing of; hence the number of pheasants, and loads of other game, sufficient for a winter's sport for two or three guns, which are sacrificed to the gratification of having one or two great days: and this vast slaughter is committed without the aid of any dogs, beyond, perhaps, a brace of retrievers, to the very small gratification of any genuine sportsman.

The general mode of proceeding is to collect the best and most crack shots of the neighbourhood, bad shots being scrupulously avoided, as well as those who kill their game too near, and thereby render it unfit for the market, as these battues are generally a matter of business as well as pleasure. These being assembled, the covers are driven, by a number of men and boys, up to particular points, at which the guns are placed at intervals; and as there is generally a net round the cover and in different directions through it, so as to divide the beats, with perhaps a small outlet to the last beat, the sport is tolerably divided, and shots are generally secured at all sorts of game which the cover affords, and immense slaughter effected.

Pheasants, from their indisposition to rise and their predisposition to run, generally proceed towards the guns, so soon as the least noise takes place in cover; but few rise till they are driven into close quarters by the beaters, and compelled to take wing in self-defence. If there were no nets to stop them, almost every pheasant would run out of the cover, and few shots be had; as it is a singular fact, that when pheasants reach a net which is only a yard high, instead of flying over it, as they might easily do, after having made a few fruitless attempts to get through it, they return towards the beaters. Some few of the old cocks,

who have had the good fortune to survive a few 'battues,' hop over the nets with the agility of a greyhound, and make their escape as fast as their legs will carry them. Their fate is, however, very possibly merely postponed to the end of the day, when the 'grande finale' takes place at some thick corner of the wood, with a deep ditch round it, into which these old fellows have skulked, with several of their equally old and cunning companions, to undergo their final ordeal, as there is generally some desperate work just at last.

Some, however, must escape, more birds frequently rising at the same time than can be shot at even by a dozen guns, and many escape during the loading or exchange of guns.

One gun may have an excellent day's sport with an old steady pointer, on the day succeeding a battue, in the vicinity of the cover, if there be any good turnip-fields or hedgerows. Those who have large preserves of pheasants object to their covers being beaten, or in any way disturbed, more than once or twice during the season, and hence the necessity of a 'battue.' There is some reason in this, as no bird is more easily disturbed than a pheasant, or who strays further without immediately returning, so that it would be a very losing game to disturb large covers frequently, merely for the sport of one or two guns; but still there are always parts in every cover, where a

couple of guns with one steady pointer, or with a good retriever without a pointer, might have sport without much disturbing the cover or driving the game away: but this will depend entirely on circumstances, and on the relative position of the cover.

If a cover be full of hares, and in the midst of an open country, where the tenants are allowed to keep greyhounds, and it be desirable to preserve the hares for particular occasions, such a cover cannot be kept too quiet, as it cannot be disturbed in the slightest degree with impunity. Hence the necessity of a good look-out, as in a coursing country, tricks of all sorts are resorted to to make the hares leave the covers, in which case they make their forms on the fallows, stubbles, or elsewhere, according to the season of the year, and then are victimised by greyhounds; but if hares leave a cover, pheasants do so much more readily, and stray to a greater distance, sometimes as far as two or three miles: some of them will of course return in a few days to the cover where they have been in the habit of being fed, if they have not gone into an enemy's country, and their return intercepted.

It is very easy, in a favourable country for pheasants, to raise a large stock of them; but it is most difficult to keep them when you have got them, no bird being more easily poached, both by day and night; and as there is no bird whose

exact place of resort is more easily ascertained by the poacher, all the latter requires is a couple of hours unmolested by day to clear a large plantation: hence the necessity of unremitting vigilance. To keep a large stock of pheasants together, you must feed regularly and in particular spots. The poachers are aware of this, and are as watchful of the movements of the keepers as the latter are of them; and when they learn that the keeper who has charge of a particular district is absent, they immediately repair to it, and commence their operations, one of which is called 'hingling.' If there are four men, they will, in a very short time, set two or three hundred snares at the end of a plantation, more or less, according to its size, and to the quantity of pheasants they know to be there; and when these are set, go round to the other end of the cover, and walk, at regular distances, slowly towards their snares, making a slight noise by cracking and breaking rotten branches, which will be quite sufficient to set all the pheasants in motion; and will be more effective than if they had a dog, as he would perhaps drive them too fast, and make them take wing. When the poachers reach the end of the cover, the pheasants are taken out of the snares and put into a sack, and the snares removed; they then proceed to another cover, if they think they have time, or move off, as circumstances may suggest. Perhaps they have a light-cart waiting in the nearest road,

ready to receive the spoil ; if not, perhaps they conceal the sack till night-time, when one of the party comes and fetches it. Many covers are cleared in this manner without the knowledge of the keeper ; and when the day arrives for the 'grande battue,' there is great disappointment, and the head-keeper looks very foolish, not knowing how and when he was duped, although he cannot deny the fact.

Poaching is also sometimes done in a small way by labourers on the land, by setting snares round the hedges ; but these are soon detected if a keeper does his duty. Then comes the night-poaching, with guns, which is most difficult to counteract or prevent, as the men who are engaged in this nefarious practice are generally the most desperate characters, and fully prepared to shoot a keeper with as little hesitation as they would a pheasant, should any obstacle be opposed to their proceedings ; and as they frequently muster in greater numbers than the collective force of the keepers, and as the latter are generally unarmed, except with staffs, the attempt to secure these ruffians is rarely successful, always most dangerous, and not unfrequently attended with loss of life. If the keepers, under these circumstances, could identify the poachers, an important end would be answered ; but this is generally most difficult, as the poachers frequently come from a distance, and are not known to the keepers, and,

if known, take care to disguise themselves so as to avoid being recognised, and moreover generally threaten the lives of the keepers whenever they attempt to approach sufficiently near for the purpose. Some years ago a head-keeper in Suffolk was shot at and killed by a poacher on merely attempting to identify him, without in the slightest degree, in any other respect, having acted on the offensive; and, very unfortunately for the ends of justice, when the supposed delinquent was tried with those who were thought to be his companions, there was not sufficient legal evidence to convict any one of the miscreants, although there was no moral doubt either as to their identity or guilt.

Where pheasants are very thick, artificial ones, made of wood or straw, placed in the trees, will be useful in deceiving the poachers, and saving the lives of the birds. Sometimes pitfalls in covers, if the fact of their being made be promulgated, will make poachers shy of entering a cover. Furze and broom make a capital cover for a pheasant-preserve, only requiring a good look-out by day. The best food to attract pheasants, and keep them in one spot, is buckwheat, white peas, damaged raisins, and boiled potatoes. It is also a very good plan to sow some sunflowers, if there are any favourable spots for the purpose, as they are much liked by pheasants.

SNIPE SHOOTING.

At the proper season of the year, when snipes are abundant and in good condition, they afford excellent sport; when out of condition they are sometimes as plentiful as at the height of the season, but only for a few days: they are then more difficult to kill, and show less sport, being wilder and less accessible, and more irregular in their flight. From the end of October till the end of January is their season. In November and December I have usually found them in the highest condition; but this will depend on the weather, as they are seldom plump and fat till after a few sharp frosts. In September and in March I have occasionally found them in great quantities; but in both these months they are thin and of indifferent flavour, especially in the month of March: they are then on their return passage to their native countries, and are not only thin, but have a strong, rank, disagreeable taste. In speaking of snipe shooting, I allude to that which is had in large marshes and bogs (where fifty, sixty, and more shots may be had daily), and not to the casual shooting of a few in frosty weather by the brook or rivulet side; and having had much experience in this sort of sport, and having killed many thousand snipes, I can speak

with some degree of certainty on the subject. Ireland is celebrated for snipe shooting, snipes being very much more abundant there than in either England or in Scotland—twenty couple, and even more, being easily killed by one gun in a day. There are, however, fens in Lincolnshire and Cambridgeshire where excellent sport is to be had; and in some parts of the West of Scotland snipes are also very plentiful, particularly in the Isle of Harris.

I have had tolerable snipe shooting in Dorsetshire, Cambridgeshire, and also in Scotland; but the best I ever had was in France, and there I followed it regularly and consecutively for seven or eight years, killing upon an average from four to five hundred couple a year. In the year 1828 I first commenced operations in France, and during that winter killed 1,232 head of game, more than 1,000 of which were snipes, the remainder wildfowl. My head-quarters were at Montreuil (on the high-road to Paris, about forty miles from Boulogne). In the immediate vicinity of this place, I used to have very good shooting; but my best sport was obtained in a large marais, about eight miles distant, close by a village called Villères. I also had very excellent sport in a marais at Nampont (this place is the first post on the road to Paris from Montreuil).

During the months of November and Decem-

ber, these two marais, on particular days, yielded first-rate sport; in fact, so long as there was no continuously severe frost, snipes were always to be found in tolerable abundance. The arrival of the first large flights generally occurred at the end of October or beginning of November; and on particular days subsequently, when the wind and weather were favourable, the quantity was considerably increased by further flights. If the wind were in the south-east at night, and remained there till morning, there was always a certainty of sport, more especially if the day were dull and damp—a fall of rain, with a slight breeze, was always in favour of sport.

On a very fine day, with sunshine, snipes always became scarce and wild. I have heard it asserted by some sportsmen that dogs are not necessary for snipe-shooting—that they can walk them up; but this is a very great mistake, the very best of dogs being requisite, no birds lying closer than snipes on particular days, especially when they are in good condition: wounded birds will frequently not rise till you almost tread upon them, if not found by the dog—consequently without a dog many would be lost.

Setters make the best snipe dogs, pointers being too delicate to endure the continual exposure to wet. The former are very easily broken to snipes. As it is necessary invariably, when you can do so,

to go down wind, you must teach your dogs to hunt at right-angles to the wind (and they very readily acquire this mode of proceeding with proper management), so that immediately a point is made you can go down wind and head your dog, by which means you will not only get close to the bird before he rises, but have an easy side-shot, either to the left or right hand, as you please, by the direction you take when you get immediately opposite to your dog. As nineteen snipes out of twenty fly against the wind when flushed, they are indisposed to rise as you advance down wind upon them; whereas, were you to go up wind, they would rise at a long distance, and at the same time give you a comparatively difficult shot, and on particular days you would not in this way get near a single bird.

Snipes are generally supposed to be a difficult shot, and so they are if you go up wind to them; but the reverse will be the case if you proceed in the orthodox and sportsmanlike manner by going down wind; the bird will then fly slowly round you, and so far from there being any occasion for hurry or quickness, patience will be required to allow the bird time to get at a sufficient distance before bringing your gun to the shoulder. Always take good care to shoot about a foot before your bird when he is crossing to the right or left. When there is a steady breeze, the flight

of a well-conditioned snipe is very even and steady, offering one of the easiest possible shots. No. 8 is the best sized shot if you do not expect any other game; but if there be a chance of ducks or teal, No. 7 will answer every purpose —larger shot will not succeed so well, but cause disappointment.

I rather fancy the marais in the vicinity of Montreuil are not so good now as they were formerly, owing to the extent to which draining has been carried, and also in consequence of a great increase in the number of French *chasseurs*: I will not call them sportsmen, as I never met with one who answered our idea of a sportsman; they are all what are vulgarly called Pot Hunters, as they will all shoot any sort of game on the ground whenever they can get the opportunity; and as their dogs are taught to fetch their game, chase hares, and not to 'down charge,' the amount of noise and confusion which takes place after a Frenchman has discharged his gun and killed his game, can be easily understood. Many and many a good day's snipe-shooting I have had spoiled by them; many a day the marais would have afforded me a hundred shots if I had not been interrupted: but as they had a more legitimate right to be there than myself, I only make this statement as a matter of fact, and not as a just subject for complaint, except so far as re-

lates to their mode of proceeding, which was as prejudicial to their own sport as to mine.

The moment a Frenchman has killed a jack snipe, you will hear him calling to his dog at the very top of his voice to bring his game—‘*Apporte vite à ton maître ! vite, apporte !*’—and if the dog does not take the right direction, you will hear a considerable portion of that part of a Frenchman’s vocabulary which commences with *sacré nom*, &c.; and as your attention will be naturally directed to the quarter from whence the noise proceeds, you will sometimes observe the man and dog both running, the man persevering in his address to his dog—‘*Apporte ! sacré nom — !*’—and perhaps the dog giving tongue (this I have witnessed), the consequence of which is that the dog generally flushes five or six snipes before the unfortunate jack is found; and when this is accomplished, and the jack deposited in the *carnassière*, or game-bag—without which appendage no French *chasseur* takes the field—then, and not till then, does the Frenchman think of reloading his gun, which of course has had the opportunity, from the moist atmosphere of the marais, of getting tolerably well damp, in consequence of which an endless number of missfires ensue (accompanied by an additional quantity of *sacré nom*, &c.), which are attributed to the caps, and not to this unsportsmanlike mode of proceed-

ing. The vexation and annoyance, as well as loss of sport, which is occasioned by a brace of such sportsmen in a marsh full of snipes, can be more readily imagined than described ; and this has very often been my fate. However, French sportsmen are always very courteous and polite, and never offer you any intentional annoyance — at least, I never experienced any during the many years I shot in France.*

None of the marais in the vicinity of Montrœuil are dangerous, neither are the bogs deep ; but there is sufficient water to make large boots absolutely necessary ; and as the pace you are obliged to walk at, so as to avoid the holes from which peat has been extracted, is necessarily slow, the large boots will be found more comfortable than fatiguing.

Those who have attempted snipe shooting in wet marshes, without the protection of large marais boots, have generally had but too good reason to repent it, as severe rheumatic attacks have almost invariably been the consequence. If the marais boots are properly made, and of suitable leather, and the dressing which I have recommended is well rubbed into them, they will not

* Except in the receipt of *procès verbaux* from proprietors over whose lands I had inadvertently passed, they being very jealous of any invasion of their rights, in the shape of trespass within their preserved inclosures.

let a drop of water through; but these boots must not be used anywhere but in the marais, as the leather is very soft, and easily damaged—one day's cover shooting would completely spoil them. Two pairs will suffice; but a third pair will not be '*de trop*' in case of accident, as you sometimes may get in over the tops, as I have frequently done, and then they will require a longer time to dry before they will be ready for use, as they must on no account be dried by the fire, except at a great distance from it. It is a good plan to fill them with tow, and hang them up in the kitchen during the night, and out of doors in the daytime, if the day be fine, until perfectly dry, and then they may be dressed, the composition being well rubbed in with the hand.

The boots ought to be made sufficiently large to admit of your wearing two pairs of woollen stockings, a second pair being essential to comfort, keeping the feet warm and dry; and as the nature of the ground over which you are shooting will not admit of your walking fast, you will not find the extra pair an impediment to your progress.

A friend of mine, who used occasionally to shoot with me, and who was an excellent sportsman, would never condescend to wear large boots, or take those precautions which I found to be so essential to my immediate comfort and subsequent

health, alleging that getting wet never did him any harm, and that he experienced no inconvenience from either wet or cold: he however lived to alter his opinion, and to bitterly regret his imprudence, as he was a martyr to rheumatism; whereas I have completely and entirely escaped all similar consequences. I have, however, been constantly wet through snipe shooting, in fact, soaked, as I had frequently the best sport in wet weather, but I never experienced inconvenience, or caught cold, during eight seasons of regular shooting in the marais. This I attribute to the use of the large boots, and other equally salutary precautions; I always wore flannel and warm clothing. My practice was to remain in the marais as long as I could get shots, and get my gun off, and when obliged to discontinue, proceed homewards as fast as possible, remove my wet clothes, put on dry ones, and generally immerse my feet in moderately warm water. It is hazardous to remain stationary when you are wet, a severe cold and illness may be the consequence; so long as you continue moving, and keep your blood in active circulation, the perspiration is not checked, and no risk is incurred.

The advantage of the large boots and the thick stockings, even should you chance to get thoroughly wet, by sinking over the tops of the former, is to be found in their retaining a certain

degree of heat sufficient to keep your feet quite warm, so long as you continue in motion. Of course after an accident of this kind you must take your boots off, empty the water out, and after having squeezed as much water as you possibly can out of your stockings, replace your boots ; you may feel cold for a minute or two, but a little movement will soon restore circulation, and your feet will become perfectly warm, the heat being retained by the thickness of the leather. In the constant transition from the warm, stagnant water of certain parts of the marais, to the cold, chilling spring-water, which you encounter in all directions, the circulation of the blood would be perpetually in danger of being interfered with and suddenly checked, if your feet were not protected by strong, thick boots. Having once or twice experienced the bad and disagreeable effects of spring-water, when I have been accidentally exposed to it, under such circumstances, by not having had my large boots on, I can speak advisedly on the subject, and therefore recommend most strongly all snipe shooters to be well provided with at least two pairs of large boots, and a good supply of the best and thickest woollen stockings.

With regard to the 'marais' in France, all which are *bien communal*, viz. those on which the poor have rights of pasturage, and from which they can extract peat, are accessible to the sports-

man on his getting permission from one inhabitant. A marais cannot be closed except by the *unanimous* consent of the commune, and *this is* sometimes done, for the purpose of letting the same for the benefit of the commune. Of course a *porte d'arme* is necessary, as without it you are liable to an expensive legal process, styled *Procès Verbal*, which any *garde-champêtre* (and there is one in every village) or *gendarme*, can institute against you, should he be disposed so to do, on finding you shooting without this protection.

A marais is open at all seasons of the year, and the right of access to it, for snipe shooting, is neither influenced by *l'ouverture*, nor interfered with by *la clôture de la chasse*. You must, however, be very cautious what lands you cross in going to, and returning from, the marais, either *before* the *chasse* is opened, or *after* it is closed; for were you carelessly crossing a field which was not marsh land, and not *bien communal*, and allowing your dogs to beat it, although it was next to impossible that a head of game could be found on it, you would, nevertheless, be liable to a *procès verbal*, should the *garde* meet with you at that moment, and declare *procès verbal* against you. This once occurred to me; the *garde-champêtre* having lain in wait purposely to have the opportunity of declaring his *procès*, whereby he gained five francs for himself, although he knew

well enough that virtually I had no intention of violating the law. I merely crossed one field between the *marais* and the road—and this field was as bare as the road—but as my dogs were not at heel, he *swore*, on making his *procès*, that he found me ‘*en chasse* sur la plaine,’ and as this was after the *clôture* of the *chasse*, I was fined about sixty francs, with forfeiture of my gun. Having violated the letter of the law, you are not obliged to give up the identical gun with which you were shooting, but one as nearly like it as possible, and this can be purchased for about twenty francs.

The *armourier*, i.e. gunsmith, of the locality has generally a stock on hand of these substitutes, to meet the demands of the numerous fines inflicted, as no penalty is ever pronounced for *délit de chasse* without its including the sacrifice of the gun. If therefore your gun be a double copper cap, then the substitute must be one also; and as for the locks, as the *armourier* said, ‘*pourvû que cela marche, voilà tout.*’ The *garde de chasse*, in my case, perjured himself; but as this worthy functionary is always believed by the *Procureur du Roi*, and the letter of the law is invariably applied in these cases, no explanation you can afford is ever of any avail.

To procure a *porte d'arme*, you must, in the first instance, obtain the permission of two landed

proprietors, in writing, to shoot over their land, and deposit this written document, with fifteen francs,* at the *Mairie*, i.e. *Maison de Ville*, or Town-hall. Afterwards, it is merely necessary to deposit the old *porte d'arme* and your money at the *Mairie*, to obtain a renewal; and this you had better do in the summer months, as *portes d'arme* are only issued from one town in each department, and there is sometimes a very great delay in responding to the application, so that if your demand had been sent in only a short time before the opening of the *chasse*, you might be disappointed, as was constantly the case during the time I was in France.

I mention this because, although you might have paid the money, and subscribed to all necessary formalities, you could not safely venture out with your gun until your *porte d'arme* arrived, as you are bound to produce it for the inspection of every *gendarme* and *garde-champêtre* who may request to see it; and as an explanation, in the absence of it, would not satisfy the above functionaries, a declaration of *procès verbal* would be the immediate consequence, besides an order to you to desist from shooting—and I believe a *gendarme* might seize your gun if he pleased. The *garde-champêtre*, under all emergencies, is, however, easily appeased, a *pièce de quarante sous*, in ordi-

* I believe this amount is now increased to twenty-five francs.

nary cases, sufficing ; but the *gensdarmes* are incorruptible—so much so that I never knew, or even ever heard of, a solitary instance to the contrary, although they seldom interfere with persons shooting, except at the commencement of the season, and then only during the two or three first days, when they are ordered out in *pairs* by their superior officer to explore the country, and make their report on their return.

Their province when out is to ascertain that all persons whom they may find shooting are furnished with a *porte d'arme*, and also to declare *procès verbal* against any *chasseur* they may find either trespassing on any standing corn, or allowing his dogs to do so. This is a *délit de chasse* against the public, from which there is no escape when a *gendarme* declares his *procès*, but is easily compromised with the *garde-champêtre* ; in fact, five francs to each *garde-champêtre*, on the opening of the *chasse*, makes them blind during the entire season—and this is very intelligible, as their pay is miserably low. Some of the private *garde-champêtre* are, however, a little more difficult at first, and require stronger arguments than the former, but, with management, are not at all refractory. I never had any *procès* after my first year's residence in France. A *garde-champêtre* cannot declare his *procès* except he has his badge of office on him ; and this consists of a

plate, in the centre of which is written the name of his parish, together with his title, functions, &c. which he has on his arm, or on a belt fastened round his body; but as it is bright, and may be seen at a distance, they frequently pocket it, when in pursuit of any delinquents, and only produce it when close at hand. As the *gensdarmes* are always on horseback, they are easily perceived from a distance, and their appearance at any time is hailed by the legitimate *chasseur* with pleasure, as the poachers, with whom every district more or less abounds, and who are considered a great nuisance, are immediately put to flight, and do not reappear for several days. The *braconnier du village* is never interfered with or molested by the *garde de chasse*, the latter being generally a neighbour, relative, or friend of his; and if you make any complaint to the *garde*, his reply invariably is, 'Mais, monsieur, il faut que tout le monde vive.'

I have sometimes known *gensdarmes* to have visited particular districts on foot, disguised in a plain dress, when commanded so to do by their *chef*, in consequence of complaints having been made to the *gendarmerie* against certain individuals for poaching, i.e. shooting without a *porte d'arme*. The *gensdarmes*, however, never interfere with the *huttiers*, provided they confine themselves to their hut-shooting. There is one singular

circumstance under which a *gendarme* can make a *procès verbal*, which I mention as illustrative of the paternal care of the French government, and that is, in the case of a *chasseur* being found shooting in his *own* standing corn. The proprietor, when detected in this predicament by a *gendarme*, is considered as doing a public injury, and is as liable to a *procès* for *délit de chasse* as a stranger.

HUT-SHOOTING IN FRANCE.

ON the French coast, duck shooting from huts is so extensively resorted to by the peasants, and with so much success, that not only are the towns in the immediate vicinity of the operations supplied with wild-fowl during the season, but even Paris is indebted to this prolific source for a portion of its constant and abundant supply, as I believe they have no decoys in France similar to ours. Very few, if any, *chasseurs* pursue this sport as an amusement; it is purely one of business, and hundreds of the poorer classes obtain their livelihood by it during the winter months. It involves little expense beyond ammunition, a gun, and a pair of marais boots, and no skill in shooting, all the shots being sitting ones, and at a short distance; and as the barrel of the gun rests

upon a bar of wood, or piece of turf, under the aperture through which the muzzle is presented, and as there is no occasion for hurry, the most deadly aim can easily be taken, especially when a large flight of ducks is to be fired into. I have known one man kill as many as forty wild ducks in one night and morning, for it is only during the evening and morning flights that any number of shots are had; wild-fowl rarely move during the night, when once settled to their feeding places, unless, by some accident, they may have been disturbed; but sometimes a shot or two is had when the moon is up.

The places selected for the building of the huts are various; if on private property, permission must be obtained from the proprietor, and this is rarely refused; but, in some localities, certain positions are so very favourable and lucrative, that they are let by the proprietors to the huttiers by the season; but, generally speaking, four-fifths of the huttiers make their huts on '*bien communal*,' where they have a right to do so if they belong to the commune; and as all along the sea-coast, at least in those parts where I have resided, there has always been a vast extent of marais, or marsh, which has been '*bien communal*,' the poorer classes experienced no obstacle to their obtaining their living in this manner. And no *porte d'arme* is required.

There is a sort of tacit understanding between the huttiers not to interfere with one another; so that when a huttier has once taken up a position, he maintains it year after year, without being interfered with by his brother huttiers. Sometimes huts are located within a quarter of a mile of the sea-coast, sometimes at a distance of six or more miles, the remote places being as good, sometimes better, than those in the immediate vicinity of the sea: the essential point is to be either near the feeding-ground, or in the line of flight taken by the wild-fowl night and morning.

I resided during several winters close to a large marais, which was distant about seven miles from the sea. In and about this there were from thirty to fifty huts; and as the place of my abode, at this season of the year, was not more than half a mile from the scene of operations, I used constantly during night to hear the report of the huttiers' guns, which resounded along the marshy ground more like small cannon than fowling-pieces; but as the arm generally used by these men is an old musket converted into a copper cap gun, and will carry a pretty good charge, the loudness of the report can be well understood, somewhat augmented by the stillness of the night.

The summer season is generally selected for the building of huts, in order that they may be made warm, dry, and comfortable: they are ordi-

narily sufficiently capacious to contain two persons and a dog. The places selected are sometimes on small islands or promontories commanding a view over two pieces of water surrounded by reeds and rushes, occasionally at the edge of a piece of water, sometimes exactly in the centre of it, if the water be what is called an overflow, or artificial, which it very frequently is, by being supplied from some neighbouring canal or stream, and contained within certain boundaries by sods and turf conveyed and placed there by the huttiers. When this is the case, the hut is almost invariably placed in the centre; and as the water is only knee-deep, the huttier walks through with his marais-boots, fixes his decoy-ducks to their different positions, and picks up his dead and wounded birds after a shot without difficulty; whereas, in deep water, a man requires a dog to fetch his birds, and a boat to convey him to and from his hut, if it be on an island. The most convenient places, therefore, are where the water is shallow, and are frequently quite as good as those where the water is deep, if the spot be judiciously selected relatively to the line of flight of the fowl; and this is easily ascertained, as it is a curious fact in natural history, respecting the instincts of birds of passage, that year after year they may be observed arriving and departing to and from precisely the same direction, as if a road were marked out in the heavens

for them to pursue. And they have also a certain line of flight at night, when they come inland to their feeding-ground; so much so, that sportsmen, in many places, remain in the evening to await the flight at particular spots, and have good sport.

In the beginning of the month of November, I have frequently observed the arrival of wild-fowl of all kinds, together with plovers and snipes, all coming from the same direction against the wind, as if they had all one destined point to reach; and although all these birds of passage invariably travel against the wind, the large and various flights scarcely ever arrive except the breeze is sharp and cutting. A moderate breeze, although in a favourable quarter, is seldom attended by any large flights of fowl. From the 28th of October to the beginning of November, I have generally observed the largest flights of all sorts of birds of passage. On the 28th of October, in the year 1828, at Montreuil, in France, I witnessed the arrival of the greatest amount of snipes, ducks, teal, and plover, I ever saw in my life. The wind was blowing strong from the south-east, and had been in that quarter previously through the night. During the whole of the day I observed large flights arriving—snipes dropping in the marais, plovers upon the plain, ducks and teal in the river, and in different large pieces of water

in the marais. All the huttiers were of course out on the night succeeding this arrival of the wild fowl, this being a signal for the commencement of their nocturnal operations. I killed, in four consecutive days, 120 snipes, with some few teal, ducks, and golden plover. The amount killed by the huttiers, of ducks and teal, was large.

The huttiers seldom kill any other wild fowl from their huts than the common wild duck and teal. Flights of widgeon will not drop to the call of the decoy-ducks. Sometimes I have known them kill a bird called '*le rouge*,' which is considered in France the best eating of all the wild-fowl: it is generally very fat when in good condition. The male bird has a reddish breast, and the bill is large, flat, and round. It is not, however, what we call the red widgeon; if anything, it is rather smaller. I have never met with these birds in either England or Scotland; I therefore suppose they are not very common, and have only very rarely shot them in France. I have frequently shot in the river both dun birds and pintail, with many other varieties of the duck species.

I will now endeavour to describe how the hut is constructed, and give some slight detail of subsequent operations. When the spot is fixed on, and the size decided, a little trench is dug round the external circumference, to a depth sufficient

to carry off any water from the intended base of this nocturnal domicile. The centre is then excavated to the depth of about one or two feet, leaving an intervening space sufficient for two persons to sit down comfortably. The superstructure, which is of circular form, is then made by willow or hazel branches fixed deeply and firmly in the sides, the longer and stronger ones forming a semicircle, by each point being fixed in the ground at the opposite sides of the excavation : a small opening is left either in the front or in the rear, to admit of the huttier's access. When the woodwork is completed, straw and dry rushes are introduced thickly between the branches, and strongly interwoven ; there is then a final covering of turf, with the sward outside, so as to give the hut, when finished, the appearance of a mound of earth. A door is made to close the aperture through which the passage is effected, the external part of which is also covered with turf. There are also several loopholes, through which the huttier can either command a view of his piece of water, or pass his gun through when occasion may require: these he keeps filled with straw, removing, and replacing again, as occasion may require. Huts, when made in the manner which I have described, are very warm and comfortable ; in fact, sometimes too warm. There is, of course, always a good supply of straw, fern, or dry rushes

at the bottom, with sometimes a board or two underneath. I have often found these huts very serviceable as a place of refuge from a heavy storm during the day, when out snipe shooting.

From three to five decoy-ducks are generally used—if three, then one mallard; if five, then two—and these are tied by the leg, in the water, to stakes driven in for the purpose, and are placed at respective distances, some on one side of the water, some on the other, so as to leave the centre clear for the reception and killing of the wild-fowl, without molestation or injury to the decoy-birds. The wild-fowl will, however, drop frequently quite close to the tame birds, in which case the huttier is obliged to exercise patience, till a fair opportunity presents itself of his being able to secure the most productive shot, clear of his own ducks, by availing himself of the moment when the largest number may be together. When the water surrounding the hut is too deep to admit of the stakes being driven into the ground, as is generally the case in those positions which are not artificial, a long cord is drawn across the pool of water, and secured on the banks of the opposite sides, and the decoy-ducks are fastened to this cord at intervals, and when ducks are killed a dog is required to bring them, or perhaps a boat is used, which lies concealed in some contiguous reeds.

In the overflows, or artificial pieces of water, the huttier, who is generally provided with long marais-boots, walks into the water, and secures his ducks immediately, without any difficulty, especially if he has a dog to assist him, which most of them have, and then returns to his hut, reloads, and is ready forthwith for another chance. He ought to reload in the first instance ; but no Frenchman ever thinks of loading his gun, in any sort of shooting, till he has bagged his game. The man who is surrounded by deep water cannot proceed with equal celerity, as it sometimes requires time to secure his wounded birds ; however, rather than risk a delay by pursuing wounded birds too long, whereby he might lose a favourable opportunity for another shot, he secures the dead birds, and as many others as he can on the spot, leaving the remainder till morning, when he has no difficulty in finding most of them, with the assistance of his dog, in the contiguous reeds and rushes. Some, however, of course, escape, and become prizes for the snipe shooter who may chance to beat the marais on the succeeding day. I have bagged many in this way, and shot more which had been only slightly wounded, and could fly very well, but, from having been touched, had not left the marais, but taken refuge in thick rushes and water : these birds generally lie very close to a point. The huttiers sometimes, how-

ever, beat the marais themselves at daybreak, with their dogs, in quest of their wounded birds, when they have shot into large flights during the night, and fancy any of them are lying in the vicinity of their huts, and often in this respect very much interfere with the sport of the snipe-shooter, who is, perhaps, advancing to commence his sport just as they have finished theirs : however, on a favourable day for snipe-shooting, the snipes don't leave the marais when disturbed—they merely change their ground, and when not shot at soon drop again, but they don't lie quite so well after having been once flushed. As soon as it is light in the morning, snipes lie remarkably close ; and in the short days of November the sportsman cannot commence too early. I have often commenced as soon as I could see, and continued till dark.

November and December are the two best months for the huttier. Ducks are then most abundant, are in the best condition, and fetch the highest price. January is sometimes as good, if the weather be not too severe. 'Les huttiers' generally take possession of their huts about half an hour before dark, so as to be prepared for the first flight. When I was in France, and in the daily habit of snipe-shooting in the marais during the autumn, I used constantly to meet these nocturnal sportsmen proceeding to the scene of their operations, with their baskets of decoy-

ducks upon their backs; and before I had left the marais, the quacking resounded from one end of the valley to the other, relieved by an occasional shot.

The majority of the huttiers remain all night, and, after the evening flight is over, go quietly to sleep and await the morning flight: some go home after the evening flight, if their cottages be close at hand, and return before break of day for the morning flight.

The birds used as decoy-ducks, although tame and domesticated, are, I believe, of the wild breed; they have their exact size, shape and make, colour and plumage, and the same fineness of the web of the foot; hence their efficiency for the purpose for which they are used: their quacking is incessant, and I presume intelligible to their wilder-brethren in the heavens, as it is constantly responded to by them, and occasions their descent.

Some of the huttiers adopt the plan of having one mallard in the hut with them, one of his legs being secured by a lengthy cord, so that they may occasionally let him out to stimulate the quacking, when it has from any unknown cause momentarily ceased.

Common English ducks would be useless for the purpose of hut-shooting, even if you could induce them to quack as incessantly as these foreigners, as their invitation would not be

responded to by birds of passage, their language probably not being intelligible. This fact has been ascertained by experiment, and may be verified by those who have large pieces of water suitable for wildfowl, by procuring a few brace of common French ducks, breeding from them, and confining them to these localities. Roosting-places may be made for them amongst the reeds, on the sides of the water, or on an island if there be one, so that they may be on the water at all times when their instinct may take them there; and it will then be seen that as soon as the passage of wildfowl, in the early part of winter, commences, your Frenchmen will have numerous companions.

If the pool be extensive, places of concealment suitable for the breeding of fowl, away from any thoroughfare, should be made, so that the wild-fowl may not be disturbed, and of course not shot at. Many will remain to breed, both ducks and teal; they breed in Scotland in the heather, and amongst rushes contiguous to the fresh-water lochs, and give very good sport in the months of July and August; after which they make their way down to the sea-water lochs, and remain there for winter sport during the day, returning at night to feed by or near some stream or fresh-water loch.

But to return to the system of 'hutting'

in France—I must not omit to mention that nets instead of guns are sometimes used, and with success. These are fixed in a frame of slightly-made woodwork, with two wings, one on either side of the piece of water, the decoy-ducks being in the centre; the huttier having a small cord fastened to the stick which supports either net, by the removal of which both nets fall simultaneously, enclosing whatever wildfowl may be in the centre. If this plan were well carried out, it would be much more productive than the gun; but it would seem that there are difficulties in the way, from its not being generally adopted.

I recollect a Frenchman telling me of a friend of his, a huttier, living on the coast near Etaples, having on one occasion enclosed so large a quantity of ducks that his net gave way in all directions, and he only succeeded in securing seven or eight of them: his loss of course was considerable, and his friend observed, ‘Il en a pleuré du chagrin.’ The probability is that the net was some old fishing-net, half-rotten; but the fact of his having been able to enclose so large a number of wildfowl is sufficient evidence that the principle was good, and that his want of complete success arose solely from his bad tackle.

I have occasionally been in these huts, but never had much sport; but even if I had had, I should never have become attached to this de-

scription of shooting, as I dislike the confinement so much that no amount of game would be any compensation. As a continuous pursuit, the charm in shooting appears to me to consist more in the inducement to exercise—imparting health, vigour of body and mind, and good spirits—than in the amount of game slaughtered. Of course every sportsman likes to kill a certain quantity of game as a reward for his exertions, but I do not think the large amount killed is always an evidence of the pleasure and sport that has been had.

For my own part, I would much rather shoot over a wild country where there was a mixture of game, where the result of the day's sport depended upon my own exertions, and where in the morning, before starting, I should be in a pleasing state of doubt and uncertainty as to the quantity and kind of game I might kill,—than shoot over highly-preserved land, where the amount to be killed was limited and fixed before starting, so that I should know nearly to a certainty how much I could kill, as well as the description of game. But '*de gustibus non est disputandum*:' so I will say no more upon this point, but return to my relinquished ground in the marais, and to the operations of the huttiers thereon.

As long as the weather remains fine and open, they go regularly every night to their huts; but

when there is no moon, and the nights are very dark, and their chances of sport reduced, they do not go so regularly. The twilight is then of short duration, and when night once sets in the obscurity is so great that although they might hear the ducks in the water before them, they would not at all times be able to discern them, so as to take a shot, and would therefore be compelled to await with patience their chance at daybreak; but as one good shot repays those who go at night, they seldom desert their posts till after daybreak.

When a frost takes place, if it only lasts a few days, it does not much interfere with their sport, or rather success. They break the ice with a pole, fix their decoy-ducks, and keep the centre as clear and open as they can, and sometimes make some capital shots. When the frost continues beyond two or three days, the nocturnal part of the business is relinquished, and they merely go to their huts in the morning, an hour before daybreak, and try their chance; after which they resort to the river, which in a severe frost gives good sport, and attracts a host of chasseurs, especially on Sunday: then every man who has a *porte d'arme* is sure to be out, and a great many who have not immediately make a rapid retreat on the appearance of a *gendarme*.

From Montreuil to Etaples, a distance of about

three miles, the latter place being on the seacoast, there is an excellent river for wildfowl shooting in every respect suitable. In the first place, it is not more than from forty to sixty yards in breadth, till within a mile of Etaples, where it empties itself into the sea—in this latter distance it is about double its former breadth: in the next place, it pursues a very circuitous and serpentine course, forming inviting angles, corners, and nooks for wildfowl to drop in; and as throughout the distance the banks are high and overhanging, every opportunity is afforded to the sportsman of close approximation to the objects of his search, when either observed from a distance in the river, or seen to drop into it.

The numerous turns and bends in the river afford also endless places of concealment as the wildfowl approach from the sea, either at the usual hours of flight or at the rising of the tide; and first-rate sport might always be had during a frost, if it were not marred by the superabundance of chasseurs. Early in the morning, and sometimes during the day, when the weather was very severe, I have had capital sport; the flights of fowl were numerous and large, and when the tide rose they came inland in quick succession, following the course of the river, and generally within gunshot—some dropping in the river, others pursuing their aërial course.

By keeping concealed behind a bank, I have fired on these occasions a series of very productive double shots in succession, and found Eley's common cartridges very successful; but although I have frequently fired into the middle of very large flocks of widgeon, and almost constantly killed two birds with each barrel, I seldom killed more with the cartridge. But the advantage of the cartridge is found in actually *killing* your birds, there being no plunging or diving in the water. Nine times out of ten they fall dead; whereas, although with loose shot more birds might be brought down, four out of five would be winged birds, and occasion much trouble, loss of time, and of subsequent sport, even if you were accompanied by a good retriever. For single birds, at long distances, I found Eley's cartridges unexceptionable.

During several severe winters at Montreuil, the flights of wildfowl were large and abundant, combining an endless variety. I killed many birds that were unknown to me, besides ducks, teal, widgeon, dun-birds, pintails, sheldrake, wild geese, and swans. Of wild geese there were many large flocks. I often saw flights of swans; in one there were as many as twenty-one. I happened to get a shot at one which was alone in the river, and killed him. The common and red widgeon were very numerous, but the most abundant

in very severe weather was the black widgeon, which the French call 'pilet.' The flights of these are large, there being sometimes as many as from twenty to fifty together. They are very tough and difficult to kill, and when only winged give the retrievers much trouble ; in fact, without the further assistance of the gun, they would escape, as their power of diving and keeping under water is very great. As a sitting shot in the water, at a moderate distance, they put the best of guns to the test—so much so that it is better, when you can get a chance of a shot at a number of them flying, to avoid a sitting shot, although close. These birds are, however, strong-flavoured, and not worth cooking.

WILDFOWL SHOOTING, AND INSTRUCTIONS AS TO BUILDING AND USING A PUNT.

THE western coast of Scotland affords ample opportunity, during the months of November, December, and January, for wildfowl shooting from punts, to those who are fond of this arduous and sometimes rather perilous amusement. In the first place, there is an abundant supply of wild-fowl of every description, especially if the winter be severe ; in the next place, there are numerous

sea-water lochs, receding far inland amidst woods and rocks, with various nooks, corners, bays, creeks, and other favourite places of resort of fowl—sometimes small islands, having nooks and bays partially sheltered by overhanging rocks.

All these spots are of easy access to the 'gunner' with his punt in moderately fine weather ; and as many of them, on the retiring of the tide, afford first-rate feeding-ground for widgeon, the weed of which they are fond being produced in abundance, the opportunity for sport is sure to present itself most favourably whenever the moon, tide, and wind may be suitable. But even in the daytime wildfowl of all kinds are easily approached in these localities with a punt by judicious management, if there be a slight breeze, and the day be in other respects favourable, inasmuch as, from being rarely fired at by any casual shooters, they are neither shy nor wild.

The first year I was on the western coast of Scotland, during the autumn and winter I frequently observed flocks of widgeon, from three to five hundred together, day after day, in the same sea-water lochs, which might have been easily approached with a punt ; but as neither I nor those who were with me had either punt or any gun beyond common shoulder-guns, the widgeon remained unmolested, and appeared to take little notice of numerous shots fired at snipes

and other game in the immediate vicinity of the lochs. They would, however, when disturbed by fishermen sometimes fly from one loch to another during the day, as there were two large lochs parallel to each other and almost immediately proximate, being separated only by a small intervening promontory. These two lochs were also equally their place of resort by night, as the mud, which was accessible at low-water, was covered with that particular seaweed to which widgeon are partial. In these two lochs there were about a thousand widgeons ; they made their appearance at the end of October, and remained during the winter. When occasionally disturbed by boats, or by the arrival of vessels, they took flight as far as two small islands, about a mile out in the open sea ; here, on several occasions, a few brace were killed by common fowling-pieces, the facility of proximate access being great, owing to the favourable nature of the sides of the islands ; but a large punt-gun, both here and in the two lochs, would have done wonderful execution.

These islands were also much resorted to by wild geese, especially as a roosting-place, although I have occasionally found them there during the day, and killed a few. The geese arrive in this part of Scotland generally as early as August, and do much mischief to the farmers' oats, which they attack at daybreak, or perhaps earlier, and

then retire to the islands to roost ; they, however, sometimes remain in the oats during the whole day, if not disturbed.

The coast in this part of the Highlands is so very flat, that scarcely any chance of sport is afforded to the sportsman with any ordinary fowling-piece ; the punt and big gun must therefore be resorted to. A large-sized punt, about 22 feet in length, is the most convenient, as it will hold three persons, will carry a sail, and in moderately fine weather is perfectly safe. If a punt be well made, she cannot be upset by any sea ; the only liability is of taking water in, when either sailing fast *before* the wind, owing to her extremely sharp, narrow, and shallow stern, or by being exposed to a heavy *side* sea. But a punt may be so constructed that she cannot sink, even if filled with water, by having air-pipes round her sides and in her forepart.

The best materials for a punt are oak, elm, Norway deal of the best quality, and withy—oak or elm for her bottom, Norway deal for her sides, withy for her deck and bulwarks, and tough ash for her timbers ; all the fastenings and metal-work to be of copper. I have, however, seen and used a very excellent punt built entirely of Norway deal ; she was light and buoyant, sailed well, and answered every purpose for which she was intended ; she was twenty-two feet in length. A

clever country boatbuilder completed her under three weeks, with the assistance of two persons to do the rough work. Having witnessed her construction at intervals during its progress, I will give the best explanation I am able as to the *modus operandi*. I must, however, refer those of my readers who are desirous of obtaining fuller information to Colonel Hawker's admirable work. He is, in fact, the parent of these gunning-punts, having, I believe, originated and most unquestionably brought them to perfection ; and the sporting world are much indebted to him for the elaborate and perspicuous manner in which he has conveyed his communications.

The punt whose construction I witnessed was built after Colonel Hawker's last model, but entirely of Norway deal, save the timbers, which, of necessity, were of ash :—length from stem to stern, 22 feet 7 inches ; at bottom, 21 feet 10 inches. The bottom planks were half an inch thick, the centre plank not being thicker than the others, as in Colonel Hawker's, this being a deviation from his plan. He recommends the centre plank to be $1\frac{1}{2}$ inch thick, for the purpose of receiving the stanchion ; but when it is intended only to use a single gun, it can be supported by the deck, with the assistance of a copper rest at the stem of the punt, and moved as the gunner may wish—subject, however, at

all times, to the salutary restraint of a powerful rope-breeching. A small block may be fixed for the reception of the mast. After the bottom planks are fastened together, and reduced at their extreme ends to their proper shape, a strong cord is then tied round tightly in several places, so as to give to the bottom a slight convexity of shape ; because, if the bottom were perfectly flat, the punt would neither sail so well, pass so easily through shallow places, nor be moved to and from the shore with the same facility. If the convexity were too great, it would make the punt less safe ; but it ought to be so slight as to be scarcely perceptible, in which case it will not diminish its security in the slightest degree.

During the time the bottom remains fastened (two days will be sufficient for the purpose), the sides may be prepared ; these may be three-eighths of an inch in thickness—height at bow $4\frac{1}{2}$ inches, astern 10 inches. They must be inclined outwards, so as to admit of the deck amidships being 9 inches wider than the bottom, i.e. 4 feet 9 inches, the bottom being 4 feet in width. This external inclination of the sides is very essential to security. After the sides are added to the bottom, the timbers, which must be of tough ash, steamed or boiled, so as to render them pliable, may be fastened with copper nails, and securely riveted ; they must be at intervals

of about 9 inches. The decks may then be fixed ; it is important that they be slightly convex, both fore, aft, and elsewhere, so that no water can lodge, which would otherwise be attended with great inconvenience and some risk, especially in frosty weather, by becoming congealed, and rendering the gunner's movements thereon, whilst loading, insecure and dangerous.

The decks may be covered with waterproof canvas, which must fit closely and securely. Canvas painted on the outside will answer the purpose, and if applied to the decks immediately after they are tarred, it will adhere firmly and give strength to the punt without adding to its weight. When this operation is finished, the bulwarks may be annexed. These should be 4 inches in height forward, gradually declining aft to 2 inches. Openings must be left for sculling ; these to be closed when their use is not required, the movable parts being made to fit well. There will be an aperture in the bulwarks fore, to receive the gun, and this part of the deck will be made sufficiently strong to support the gun with the assistance of the copper rest at the stem.

The thowles or rullocks may now be placed at proper intervals for sculling or rowing ; sometimes these are movable, but I think it will be found more convenient to have them fixed, and there may perhaps be an advantage in having

them covered with leather, especially for night-work, as the slightest noise will sometimes alarm and disturb widgeon, their sense of hearing being very acute. It will be as well to protect the bottom of the punt by having light thin planks laid down, one-eighth of an inch in thickness—these to be movable; and upon them you may place any suitable covering you may think proper, to lie down upon. The opening in a punt of twenty-two feet will be sufficiently large to admit of three persons lying down conveniently, being six feet in length.

When the punt is not in use, she ought to be protected by a light covering, fitting exactly over her bulwarks. The stem may be rendered more secure against damage arising from collision with rocky or stony ground, when forced through shallow places, by having a slight covering of copper. Before the punt is used and put to sea, she must be well tarred in the inside, and the outside may be painted with the exception of the bottom, which must be tarred and caulked; and this latter operation must be repeated at intervals, if the punt be much used, so as to make her perfectly water-tight.

Slate-colour will perhaps be found the best for the deck and sides, but the nearer it approaches the colour of the water the better, so as to be as little perceptible as possible. There will be a

copper fastening to receive the mast in the deck, immediately under that part which is open to sustain the gun. The mast will obtain further support from a block fixed in the bottom of the punt to receive it, if the centre plank has not been originally made of sufficient thickness for the purpose; and this point is worthy of consideration at the time of building. The mast should be nine feet in height, the sail to correspond, with reefs, in case of necessity; the rudder, as in all small boats, will of course be movable.

The loading-rod for large guns ought to be made of the lightest possible wood, with a thin copper cylinder at the end to receive the powder, *partly* open on one side, so that when it reaches the breech of the gun, the powder which it conveys may be deposited therein on the rod being reversed; the person loading elevating the gun as much as possible from its horizontal position, so that the powder may reach its destination. The handle of the rod can be flat on the open side of the cylinder, so as to be sensible to the touch in the dark, in which case this operation may be performed at night without mistake.

Suitable wadding can be had from any London gun-maker, and it is essential that this be securely rammed down on the powder; attention cannot be too particularly directed to this point, both for security and effective shooting. Cartridges are

frequently employed, but as the amount of shot used is large, it being often a pound, the paper which forms the envelope must be strong ; and on this account I think they are objectionable, and loose shot preferable, as I am persuaded that there is a very great uncertainty as to the distance at which they may burst, and that sometimes they do not burst at all, so that some of the finest chances may be lost. I have frequently known this to have been the case, and loose shot will answer every purpose when the fowl are not very wild, and obviate disappointment too frequently consequent on the use of cartridges.

For widgeon and ducks, No. 1, I think, will be found most effective, although double and single B are frequently used ; your chance, however, of killing numbers with these is somewhat diminished, except when fowl are very wild. The sportsman must therefore be guided by circumstances as to the size of his shot. There is a coarse powder prepared and sold specially for these large guns, which must be secured ; the quantity will be the exact *measure* of the loose shot used, so that the rule applicable to ordinary fowling-pieces holds good with these larger guns.

Some skill and tact are necessary in firing a large punt-gun, so as to avoid the recoil, which is sometimes severe ; and I should recommend the be-

ginner to practise first with a small quantity of powder, increasing it progressively till he arrives at the full charge, and can manage the same skilfully. In taking his aim he must lay himself down in the punt, having his left hand on the stock of the gun, so as to direct it, his cheek slightly resting upon it; with the right hand he will pull the trigger, taking care at the same time to let the stock of the gun pass under his right arm, sufficient pressure being given by his left for this purpose. A very small stock is necessary, as far as the butt-end is concerned—about half the length of a usual fowling-piece, as it is not intended to put this stock to the shoulder.

If the gun be properly managed at the time of firing, the rope-breeching will be found sufficient to counteract the effect of the recoil, without any other apparatus, *provided* the gun be of moderate size, and *not overloaded*. From the largest size guns the recoil was found to be so great, that a contrivance of some sort in addition to the rope-breeching was found to be necessary to counteract it; and Colonel Hawker invented a spring-swivel for the purpose, the gun at the same time resting on a stanchion fixed to the bottom of the punt. How this answered I am not able to say, never having either seen or used one; but Colonel Hawker speaks highly in favour of it, and

on this particular point I must refer my readers for information to the Colonel's admirable work.

In approaching widgeon in the sea-water lochs by day, the gunner must be guided by circumstances. Sometimes, when they are not wild, the best plan will be to allow the punt to drift gently down wind, till you get within shot—those in the punt keeping themselves as much out of sight as possible; at other times you must go up wind. But this is not always either an easy or successful operation, unless you have the tide in your favour; but where either ducks or widgeon have not been much shot at, and are not very wild, by good management they will be easily accessible on a day which is in every respect suitable, with a sufficient breeze.

The gunner, and those with him, will of course take care to be suitably clothed as to colour, this being as essential as in stalking. In approaching widgeon or wild ducks at night, you must on no account go down wind, as they would both wind you and hear you to a certainty, and be off before you came within shot of them; but having ascertained the precise places where they feed, you must advance up wind as quietly as possible. If the moon be up and facing you, so much the better; you will then have a good view of your birds on the mud, and be able to take a more

deadly aim. Be sure to fire high enough, directing the point of your gun to the farthest birds on the line which you intend sweeping. The best moment, if the moon and night favour you, is just before the tide is beginning to flow; for by that time the birds will have been several hours feeding, and have become settled to their position. Should you arrive too early, your chance will not be so good; it will therefore be better to exercise a little patience, especially if the night be fine.

If there be a large flock of widgeon, you will hear them long before you see them. If the noise be continuous, it is a good sign: if it be only at intervals, it must be considered as a bad omen, indicating alarm and suspicion on their part,—you must therefore exercise more caution. When the whistling and purring is unbroken and continuous, you may conclude that the widgeon are busily engaged feeding, and settled to their ground without suspicion, so that, if you manage well, you will be sure to get a good shot. The sharp whistling note proceeds from the cock bird, the harsher one from the hen. In the daytime the gunner will get many flying shots; and as some of these may be partially unexpected while he is turning the corner of some creek or bay, it will be essential to success in these instances to have a man who thoroughly understands sculling, and who will,

on the emergency of the moment, give the punt the requisite and most advantageous direction.

When crossing those parts of the loch where there is no chance of a shot, and where the sea is at all rough, it will always be advisable to have the lock and the muzzle of the gun protected with coverings for the purpose, and also immediately after a shot: this precaution must not be neglected. It would of course be better to reload instantly; but where there are many cripples, the anxiety to secure them is too great to admit of this being done till the produce of the shot be bagged. You must therefore keep your big gun as dry as possible in the meantime, and perhaps it will not be a bad plan to wipe her out before reloading. Your small gun may be safely slung under the side of the punt, protected by a waterproof covering, and so placed that, if it were accidentally discharged, it would do no injury; the best-sized shot for the cripples is No. 7, as you get into very close quarters, to give them the *coup de grace*.

A common landing-net, such as is used for landing trout, will be found most useful to convey your dead birds from the water into the punt. A good retriever will be very serviceable, especially for night-work; but none of any but a very hardy breed would be of much use in cold severe weather: — the small Newfoundland, of the St. John's breed,

I think will be found to answer best. The gunner will of course take care to be warmly clad with woollen clothing, with a light-coloured mackintosh, as an overcovering, to be used or laid aside as circumstances may suggest. He ought to have two pairs of thick woollen stockings on, and over these a good pair of long fisherman's boots, coming well up the thigh. Rather take extra clothing for night-work than insufficient, especially in frosty weather; as it may be frequently necessary to be stationary, when either expecting the arrival of wildfowl, or awaiting the most suitable state of the tide. If the big fisherman's boots be objected to on account of their weight, waterproof overalls may be substituted, and the common shooting-boot worn.

LOCALITIES IN WHICH WILDFOWL SHOOTING MAY BE OBTAINED.—BREECH-LOADING PUNT-GUN.

As there are many sportsmen who are keen about wildfowl shooting, and disposed to go any distance to obtain it, I am induced for their guidance to mention those localities in which I have seen the largest number of these birds, and where I believe, with good management, first-rate

sport may be secured. It must be understood that I refer exclusively to sport which may be obtained by the use of the punt and punt-gun.

In that portion of the sea-water loch which passes close by Ardrissaigh and forms a sort of bay near Lochgilphead, I have seen hundreds of wildfowl collected together close to the shore at low-water, affording an excellent opportunity for easy, safe, and effective punting—much more so than in more open parts of a loch. This end of the loch is about a mile from Ardrissaigh, is so well sheltered from the wind by the high contiguous ground, that in moderately fine weather the surface of the water is just in that condition which the punter would wish it to be in. This loch commends itself also to the notice of the sportsman on the score of convenience, as there is an excellent inn at Ardrissaigh: steamers pass daily, and there is a regular post to and from London. There is also an inn at Lochgilphead. Either of these inns will be convenient, as, independently of the shooting which is to be had in their immediate vicinity, several other localities abounding in wild-fowl, and calculated to give good sport, are within reach. One of these is the river which runs parallel with the Crinan Canal, and empties itself into the Sound of Jura, at the mouth of which I have seen hundreds of widgeon which seemed to me comparatively tame, and were in such a position as to

admit of easy access by good management. Nearly at low-water is, I fancy, the best time, when all the birds are congregated close to the sides of the river, so that if the punt were launched into the upper part of the river it might be allowed to glide gently down with the tide, so as to admit of the punter's having a first-rate chance; but of course he must be guided by circumstances, as it may be sometimes advantageous to punt up the river against the tide. In fresh water a thoroughly well-made punt and good management are more imperatively required than in salt-water; but when wildfowl have not been shot at they are easily approached. Crinan is not more than four or five miles from Lochgilphead, so that it can be easily visited by a sportsman whose head-quarters are at Ardrissaigh, whenever he feels disposed to change the scene of action. He might possibly not find so many fowl there as at Lochgilphead, but he would find several good lots of widgeon, and be likely to have a good day occasionally. I say occasionally, because in wildfowl shooting change of quarters is constantly desirable, as wild fowl, perhaps more than any other birds, become very shy and wary if frequently disturbed and shot at. There is also a comfortable small inn at Crinan, where the sportsman may take up his quarters for a few days. At about eight miles' distance from Crinan there are several other sea-

water lochs, in which I have seen thousands of wildfowl throughout the winter, which were seldom molested, and consequently comparatively tame.

A first-rate punter in these localities in a suitable winter might obtain first-rate sport. Some of these lochs are in the immediate vicinity of a village called Tavaillaich, where a seaman might be found who would accompany the punter, and give him every information and afford him assistance. There is a small inn, but the accommodation is indifferent, so that I should recommend any sportsman visiting it to take his own provender with him. He will, however, find a good bed. As my knowledge of this hotel does not apply to the last few years, it is just possible an improvement may have taken place in its internal arrangements, which certainly was required. There is a small bay connected with the loch within fifty yards of the inn, so that the punter will have no distance to walk to reach his punt. At the head of the loch, which is called Loch Swaine, there are three branches, which run some distance between banks covered with wood; and at the end of each of these there is a small bay, where the wildfowl generally congregate, and are easy of access with good management, on a suitable day. All these branches are considerably narrower than the main loch; and at low-water, teal and wild ducks, as

well as widgeon, may be found feeding amongst the stones by the sides, as well as at the end of the loch. Teal, which abound, generally resort to the quiet bays and nooks at the ends and by the sides of these lochs, but are rarely seen in the open and wide parts of the loch. There are two islands in this loch round which, at low-water, all sorts of wildfowl resort.

Loch Sweene is about five miles in extent, exclusively of the branches at the end, one of which may be three miles in addition—the other two about a mile each. Near the end of Loch Sweene (or Swaine) towards the sea there are several bays, much resorted to by fowl of every description, and there are one or two other lochs parallel with Loch Sweene and connected with it at the back of a place called Taynish, which are also good, and accessible from Loch Sweene; and at the distance of about a mile from the end of the loch there are two or three small islands, about which excellent sport can be obtained in severe weather, if the wind and tide permit of the safe passage of the punt. Round these islands are several small bays, which are always covered with wildfowl, and easily accessible from the land, so that the ordinary fowling-piece may sometimes be brought successfully into action, as well as the larger weapon, in the punt.

In severe frosty weather, when the tops of the

contiguous mountains are covered with snow, woodcocks, snipes, and golden plover may be found, and sometimes wild geese: the latter, owing to the uneven, rugged, and rocky surface, may sometimes be easily approached. These islands are seldom without a good supply of snipes and golden plovers in any weather during the shooting season, so that the sportsman will never be disappointed on visiting them in the months of November, December, and January. Woodcocks he will only find in any quantity during a severe frost. There are no bushes or trees, but much long coarse grass, rushes, and flags up to the knees. Amongst the rocks there are numerous springs, to which, I suppose, woodcocks are instinctively attracted: I have found them equally amongst the rocks, and in the flags and rushes. The sportsman who is a good shot will probably bag all he finds, as these birds fly from one island to the other, and a very fair, easy, and open shot is generally to be had at them. As the tide runs strong between these islands and the land, at particular times, the sportsman must never delay his return home towards evening after the opportune moment for taking his departure has arrived, as he might be carried into the Sound of Jura and exposed to great peril. Indeed, no sportsman ought to visit these islands unaccompanied by a person thoroughly experienced in the nature of

the locality, as well as with the winds and tides, and the management of punts and of small open boats.

I express myself advisedly on this subject, having incurred serious risk and peril, and having had some narrow escapes—the fineness of the morning having proved no guarantee as to the safe condition of wind and tide towards night. Every sportsman who extends his experiments in punting beyond the sides of the sea-water lochs, and visits islands out in the open parts of a wide loch or sound, ought, if he consults his safety, to be accompanied or followed by a large boat. A punt will stand a great deal of sea, and is much safer than a very much larger boat; but it is not perfectly safe out in the open sea in the event of a storm suddenly coming on, which is too frequently the case in the sea-water lochs and sounds of Scotland. If, however, the operations are confined exclusively to the sides of sea-water lochs, in fine weather no difficulty may arise; but still, as the punter may either go all the way round the head of the loch, or cross over it during the day, and find himself at night on the wrong side in the event of wind having increased in force, and the middle of the loch being too rough to be crossed over safely with the punt, it will always be as well for the sportsman to order a large boat to be out towards night to convey him safely home; as in the event of its not being safe for him to cross

the loch, if he had no large boat at hand, he would have no other alternative than to go all the way round the head of the loch, which might delay him several hours. I once found myself on a small island, which I had visited on returning home in the evening for the purpose of killing a few woodcocks, where I was compelled to remain throughout the night, the wind having suddenly risen in great violence; and being opposed to the tide, the water was so rough, that even with a boat of 15 feet keel, my exit from the island was not safe—at least not from that side of it on which I had landed, and by which my boat was lying.

Attention may now very suitably be invited to the subject of breech-loading punt-guns, the remarks in the first chapter on wildfowl shooting in reference to punt-guns being almost exclusively applicable to guns constructed on the ordinary detonating principle.

The superiority of the breech-loader over the ordinary detonator for the purpose of punting is so decided, that a few explanatory observations may possibly not be unacceptable to those sportsmen who have not yet departed from the old system, and at the same time not unworthy of the consideration of others who are about to enter upon this description of exciting sport, and who as a matter of course would like to be in possession of the most suitable gun for the purpose.

After a shot with an ordinary punt-gun the sportsman is under the necessity of rising from his concealed position in the bottom of the punt before he can reload, whereby he is seen by all the wildfowl in the immediate vicinity of his last shot; he is also obliged to stand upon the deck before he can raise the gun sufficiently for wiping out and reloading, which operation is a long and tedious one, and sometimes attended with risk, from the slippery condition of the deck in frosty weather. Skill is also required to insert the powder properly, and special attention must be directed to the management of the ramrod so as to force the charge well home; as a difficulty sometimes arises in this respect when the inside of the barrel is damp, which it generally is if there has been a long interval between the shots. The strength of the powder is also considerably affected in damp weather if there be much delay in obtaining a further shot. Now in the use of the breech-loader all these inconveniences and disadvantages are obviated, as the sportsman can reload without rising from his concealed position, with ease, safety, and despatch, and (what is also important) without being seen by the wildfowl, in consideration of which advantage he will frequently be able to obtain a second shot without delay—as the widgeon may either fly within reach of his punt after he has reloaded, or drop again at a

short distance ; whereas had they seen him standing up in his punt they would instantly have taken their departure to an immense distance, and in all probability he would not have seen them again during the whole day. It has been frequently ascertained from experience that a shot fired by a person in concealment does not alarm game so much as the sudden appearance of any offensive object. Deer even, when shot at, if they perceive no object calculated to alarm them, neither man nor dog, will gaze about for a long time before they go off, and in some instances sufficiently long to admit of the stalker reloading his breech-loader whilst lying in a recumbent position, so that in the event of their coming towards him he may obtain a second chance—in fact, a double shot. An instance to this effect came within my knowledge. Wildfowl I have often seen drop after being shot at, within a very short distance, when the sportsman was sufficiently prudent to remain motionless in concealment. If neither man nor dog present themselves after a shot be fired at a large lot of wildfowl, the greater number of them are indisposed to move ; they don't know the direction from which the shot came, and being naturally apprehensive of flying towards the dangerous quarter, remain for a short time in a state of indecision.

From what I have stated I think it may be

inferred that the breech-loading punt-gun has the following advantages over the ordinary detonating muzzle-loader: it is—

1. Immeasurably safer.
2. Much more easily, more safely, and more expeditiously loaded.
3. Affords more chances of obtaining shots.
4. Is more conducive to the ease and comfort of the sportsman in very severe weather, as he is not obliged to rise for the purpose of reloading.

I have examined several breech-loading guns for this purpose, and consider the one made by Baddeley, of 183 Central Street, City Road, Islington, to be immeasurably the best in every respect. It is good in principle, is easily managed and perfectly secure, and can be loaded in about a minute. His last improved punt-gun, which I have examined, carries 2 lbs. of shot and 7oz. of powder. This gun is rather too heavy for a small punt; one carrying from one pound to a pound and a half of shot I should consider preferable; the larger size is more suitable for a large-sized boat or yacht. There is a plug under the barrel and connected with it, which fits into a revolving socket, well secured in the bottom of the punt, so that the punter can easily turn the muzzle of his gun in any direction which may suit him. Within a few inches of the breech-end of the barrels there

is an opening, in the bottom and at the top, for the reception of the false breech, which fits closely in its place, and is brought and kept there by a powerful lever, on which it rests, and to which it is attached ; this lever also keeps the stock firmly fixed in its proper position, and when brought up lies horizontally under the barrels. The lock is on the right side of the barrel ; the hammer or cock strikes horizontally on a projecting nipple made for the reception of a copper cap. As the cartridge when placed in the barrel is entire, and only contains powder and shot, it must be punctured by a pin introduced through the nipple before the copper cap is placed on the nipple. After a shot is fired, a movement of the lever instantaneously releases the stock, which declines sufficiently to admit of the cartridge being immediately withdrawn by an extractor, whose end fits exactly into the centre of the copper head of the cartridge, an opening having been made and formed expressly for the purpose ; so that the operation of reloading can be speedily and easily accomplished by the punter without obliging him to rise from his horizontal position. The extent to which the recoil of the gun is counteracted, by the braces and the movable socket, renders its management comparatively easy and safe in the hands of the skilful and experienced sportsman.

WOODCOCK SHOOTING.

If cocks were more abundant, woodcock shooting would, I believe, take the precedence of even grouse-shooting. As it is, I am one of those who infinitely prefer it to that or any other kind of shooting. There is so much variety attached to it; the spot in which you find the bird is so frequently unexpected; then his irregular manner of rising, the peculiar flap of his wings, which cannot be mistaken, electrically vibrating on the sportsman's ear, especially if it be the first cock of the season; his varied flight when up—sometimes slow, heavy, and oscillating, at other times direct and rapid as that of a hawk; then there is always an uncertainty as to the direction which he may take—whether he will go to the right or to the left, straight forward, or come exactly towards you:—in fact, there is sometimes a suspense of several moments, first between your hearing and seeing him, next between your seeing and being able to decide when to shoot at him; at other times you hear, see, and shoot at him at the same moment, and although you had only an instant's glance at him, are as successful as if you had had him in sight for several moments. All these circumstances create an interest, and produce an anxiety with the keen sportsman,

which constitute the peculiar charm of woodcock shooting.

But as this combination of circumstances can only occur in a wild country, amongst rocks, heather, brushwood, dingles and dells, the excitement and the interest which I attach to woodcock shooting may appear exaggerated to those who have simply shot this bird in England, where the uniform character of the cover is such, that the rising and flight of the woodcock may present little variety; but still I believe it is rare to find a genuine sportsman who is not more pleased at shooting a woodcock than any other bird. Those who have shot in wild countries will thoroughly enter into my sporting feelings on the subject.

The woodcock is generally considered an easy shot; but notwithstanding this opinion, there is no bird so frequently missed; and if the experience of good shots be appealed to, I think it will be admitted no great number of cocks has ever been killed consecutively.

To this it may be replied that numerous chance and long shots are taken, because the cock, being a bird of passage, and also a tender bird, and easily brought down, the remotest chance is taken advantage of; but still, apart from this consideration, I believe more fair shots are missed by even good shots, than at any

other bird ; and if this be the case, I think it fair to conclude that he is not so easy a bird to kill as is generally supposed. If he would rise, like any other bird, at a fair distance, and be off at once, he would rarely be missed ; but this is not often the case, as he frequently rises so clumsily, and at the same time so near, that you cannot shoot immediately, but must await his departure, and are thus kept in a state of suspense, and sometimes of doubt, whether you will even get a shot at all, as the direction he may take when you are very close upon him is always uncertain. And it not unfrequently happens, that a bird you thought as safe as bagged on rising, there being no apparent obstacle to your having the fairest shot in the world, by some extraordinary quick turn eludes all your skill. As you cannot shoot at ten or twelve yards, and as a cock often rises at this distance, you are obliged to wait ; and just when you suppose you must have a certain shot, by his going either to the right or left, or straight forward, the coast being quite clear, in an instant he flies exactly towards your face, in so bungling a manner that you could almost fancy he was wounded, or could not fly at all ; and as you turn round to bring your gun up, you either stumble, or your gun is impeded by a branch, or he turns out of sight behind a rock, or a tree, exactly as you pull the trigger, and you

thus, in spite of yourself, shoot behind him, and he escapes ; and, as an aggravation to your disappointment, all your efforts to find him again are fruitless.

In a rough wild country, where there is a mixture of blackthorn, hazel, birch, ash, and dwarf scrubby oak, with rocks and heather, and where there are many steep rugged acclivities, inaccessible to the best of beaters, good spaniels are indispensable, as it is impossible to flush cocks without them. Even tolerable spaniels would be useless in many of these places, as cocks will not rise except forced to do so by good, hardworking, persevering dogs, who thoroughly understand their business, and will go round and under every rock and blackthorn ; for so indisposed are cocks to be disturbed out of these favourite spots, that they will often settle within a few yards from where they took their flight, and it is only by the perseverance of good dogs that they can be forced to quit them, so as to afford a chance to the sportsman ; and sometimes this is but an indifferent one, as they fly so low between the rocks and bushes that the shot is quite a doubtful one.

No bird lies closer than a cock, or is more difficult to flush when he is in a cover where he intends remaining, of the nature I have just described. In fact, I have seen a spaniel catch one before he would rise, although he was for some

time hunting very busily close to him, before he winded, and rushed in upon and caught him. At other times they are very easily flushed, but in these respects they are influenced by the wind and weather; on some days being so excessively wild that they cannot be approached within shot, except you go down wind upon them; and these occasions arise when a change of weather is about to take place, especially after a few days' frost, when a turn in the wind arrives indicating a thaw. But generally through the winter, *i.e.* during the months of November, December, and January, they lie well. The first two months are, however, the best, although I have sometimes had excellent sport as late as February; but this depends entirely upon the nature of the season and of the country, as the peculiar weather which brings cocks to one place drives them away from another.

In England, Ireland, and in the northern and inland parts of Scotland, the cocks which arrive in November remain there so long as the weather continues mild and open; but as soon as a severe frost sets in, and extends beyond three days, the cocks move off to milder quarters: so that the western part of Scotland, which adjoins the sea-coast, is, during severe weather, a very favourite place of resort for cocks. The snow never lying long on this coast, nor on the adjacent grounds, nor on those sides of the covers facing the south-

east, and the covers being filled with numerous springs which are never frozen, may be the united causes of their attracting cocks in severe weather, their instinct apparently directing them to the most suitable localities.

During a severe frost I have seen as many as forty cocks in a day—nine out of ten of them in those parts of the cover which faced the south-east. There are two obvious reasons for this preference—viz., the small comparative quantity of snow to that which is found on the other aspects, and the warmth derived from the morning and midday sun. In fact, during the short days, the covers which have a northern aspect scarcely get any sun, and the snow lies, notwithstanding the sea-air, till a thaw arrives. But even when there is no frost, I have invariably remarked that covers with a north-west aspect are not much frequented by cocks, although apparently in every other respect suitable. Amidst the open heather, where the ground is broken, and there are a few springs, I have frequently found them: in fact, I believe a very large proportion of cocks drop amongst the heather upon the mountains, in springy ground, on their first arrival, and remain there until the severe weather drives them down into the covers.

I have already recommended spaniels for this sport, and I am convinced no dogs are so suitable:

in fact, they will find more game of any sort than any other description of dog, and are most agreeable to shoot to, being such vivacious and lively companions ; but they must be thoroughly broken, and kept well in subjection, or they become very mischievous and destructive of sport. An old pointer that you cannot spoil, and who will keep close to you, is an excellent accompaniment to spaniels, and will point many a cock which you would otherwise have passed. Spaniels, to do their work thoroughly well and efficiently, ought to be attended by a beater who can manage and control them, and go with them through thick places as far as it is practicable, as there are many steep, rocky, and precipitous places through which no man can pass, and which can only be thoroughly investigated by first-rate spaniels. And when you arrive at these you must always give your dogs time to work : if you hurry them you may pass many a cock.

In covers which can be beaten by men, they of course are preferable to any dogs, with one retriever to find your wounded and dead birds. This method is however expensive, but the advantage is great; you find almost every bird, and you are almost certain of having a fair shot within a moderate distance ; which is not always the case with spaniels, as they frequently flush cocks out of distance. This, however, in a wild

country, is unavoidable, as there are so many places which are inaccessible to the sportsman within shot. He has therefore no alternative but to send his spaniels into them, and take his chance of getting a shot; which can be generally managed, if there be two guns, by one keeping with the spaniels, the other going forward in the direction to which you are beating. But if you are going down wind, the second gun had better keep in the rear, as nine birds out of ten will go up wind: so that, generally speaking, the second gun will have the best chance. When your dogs flush a cock out of distance down wind, immediately stand still, and in all probability he will come straight as a line back towards you: when you can take him either as he approaches, or let him pass you. Either is an easy shot, but the former is the easier of the two, if you have acquired the habit of shooting birds as they come towards you.

The best shot for woodcocks is No. 7, with No. 6 in the second barrel for long shots, or for other game. With No. 7, if you merely get a glimpse of the cock through the thickest cover, and hold right, you will be sure to kill. With large shot you may easily miss him; and there is no compensating advantage for the use of large shot, as you seldom get long shots in cover: and moreover, when you take a small bird full with it, you terribly dis-

figure him ; which is an annoyance to good sportsmen, who always desire to kill their birds clean. A good marker in cock-shooting is invaluable, as cocks frequently drop in such singular places that you would never think of looking for them if you had not been told where they had dropped ; and also because, when you search in the right direction, you might also, in beating at the usual pace, occasionally pass them if you had not known exactly where they had been marked down : as, after being shot at, they will sometimes lie until they are almost trod upon before they will rise, and therefore very close beating is requisite ; and also, after being shot at and wounded in the body, and though apparently not touched, they drop dead after a long flight. The experienced eye of the old sportsman soon however perceives, by the peculiar flight of the bird, when he is body hit, and will observe him as long as he remains within sight ; but as woodcocks soon escape from your view, it only remains to follow the line of their flight, which is generally direct when they are body hit and fall dead : still many dead birds would be lost without a good marker judiciously placed ; in fact, even when you see a bird fall dead, if it be at a distance, he is very difficult to be found, although you fancied you had marked him down to an inch.

I have often seen men and dogs a long time at

fault, when everyone expected to pick up the bird the moment they arrived at the spot where they thought the bird must have fallen; and when at last found, all were mistaken as to the distance, although all were in line. But a bird is sometimes very difficult to be seen, especially a woodcock, when lying flat with his back only exposed to view. It is sometimes wonderful to observe how near the best of dogs will pass to dead birds without winding them; in fact, I have seen dogs run over dead birds, actually treading upon them without finding them, although at other times I have seen them wind them at a long distance. But equally good dogs in other respects differ much in the faculty of finding dead birds. There is no difficulty in finding a running bird with a good retriever, be he either Newfoundland or spaniel; the dead bird is the only puzzle. But some Newfoundlands are wonderfully sagacious even in this respect, marking the places where the wounded and dead birds drop to a nicety, and going immediately you order them to the very spot. Spaniels I have seen nearly as good, as they have quite as good noses as the Newfoundland, but they are deficient in the sagacity of the latter.

I have always found that wounded birds which drop dead fall considerably short of the distance at which they have been marked down; I would

therefore suggest to the inexperienced, that the search be made within rather than beyond the spot where the wounded bird is supposed to have fallen—some intermediate or more distant object exactly in line with the flight of the bird having been kept well in sight. I am persuaded many dead birds are lost entirely owing to the search being directed very much beyond the spot of the actual fall. It is a good plan, and one which I have adopted with success, when the spot is reached where the bird is supposed to have fallen, to leave some mark and then make a retrograde movement.

I scarcely ever recollect an instance of a dead bird having been found beyond the spot where I supposed he had fallen, but, on the contrary, very considerably within it. Snipes and woodcocks, when mortally wounded, fly in a straight line with a very slight movement of the wing, their heavy flight making them appear much larger than they really are. In fact, to the experienced eye, the flight of a mortally-wounded snipe or woodcock is too peculiar to be mistaken: they rarely or ever tower except when slightly wounded on the head, and in that case they do not drop dead, although they may be picked up by the hand when marked down; if approached with caution. Instances of this kind have occurred to me with each of these birds. When they fall dead after a long

flight they are not, as is often supposed, wounded on the head, but in the back; a shot having passed through the spine into the vitals, producing internal bleeding, consequent suffocation and death. Woodcocks when wounded in this manner, I have invariably found, pursued a straightforward course and dropped dead. If the mouths of towered birds which fall dead be examined, they will always be found to be full of blood, and that there is no wound on the head. The idea that woodcocks live by suction, although a very old one, is erroneous; they live on small red worms, which they discover by the exercise of their acute smelling powers vested in their bill; this member serves the purpose also of an extractor as well as perforator, and the upper mandible being longer than the under one, after the food is found and approved it is readily grasped and extracted. Hence the bill answers three purposes, and if the long tongue lying within it be included, which possesses the sense of taste, we may say four, as the entire bill is a taster, as well as a perforator, discoverer, and extractor. The places where cocks are in the habit of feeding are discovered by the numerous perforations in the soil made by their bills, and by the disordered state of the leaves which have been turned over, under which their search for food has been directed. Under hollies is a very favourite spot—in fact, under any well-

covered thick tree where the ground is clear of weeds. On open spaces on the moors frequented by cattle, where the grass is moistened by some contiguous spring, I have often found numerous perforations, evidently the result of the previous night's search for food. In some instances, where there was much apparently very fresh work, I have found one or two woodcocks within a few yards of the spot in the heather. Where the heather is old and high, and hollow underneath, I have frequently found cocks, especially late in the season, and sometimes quite at the commencement of it, on the arrival of the first flight. In France there is a saying, 'sourde comme une becasse,' but I don't believe this is founded on truth; for although cocks will occasionally permit you almost to tread upon them before they rise, at other times they rise wildly at long distances quite out of shot, proving that they are by no means deficient in the sense of hearing—in fact, I am inclined to believe that their not moving on certain occasions results rather from indisposition to rise than from any other cause. Some persons profess to be able to distinguish the male from the female bird by the different marks on the border of the outside feather of the wing; but I do not believe this test is to be relied on, nor do I believe that the hen-bird is larger and heavier than the cock-bird (in hawks this is generally the

case), as I have constantly found a large number of these birds killed at the same season of the year to be of similar size and weight, and with similar marks on the outside feather of the wing ; and when I have found any difference in weight, I observed it arose from difference in condition. That there are varieties of the woodcock species I have no doubt, from the numbers I have killed at different periods of the season, of different size, shape, and plumage. During one winter on the west coast of Scotland, I killed 200 cocks, and out of this number there were only three which weighed sixteen ounces. These birds looked larger and their bodies were longer than those of birds which I was in the habit of killing, and their plumage was of much lighter colour. They were in excellent condition ; they were killed in December.

Cocks of the first flight, killed at the end of October, I found were somewhat under twelve ounces ; but they recover from the effects of their passage early in November, their average weight then being twelve ounces. I occasionally killed some of thirteen—it must be a very good bird which reaches fourteen ounces. During the few years I resided on the west coast of Scotland, I killed about 750 woodcocks, out of which number I don't think more than ten weighed sixteen ounces, so that the percentage of these large birds is very small.

The weather has great influence on their weight ; so much so, that at the end of a long frost I have killed many reduced to ten ounces. Within the first week of a frost they are in the greatest perfection, their flavour being much better than during continuously mild and open weather, or after ten days' severe frost, at which time they begin to decline in both weight and condition.

On most parts of the west coast of Scotland these birds abound during severe weather, which may be explained by the fact that in all the small covers contiguous to the sea-shore there are innumerable springs which are never completely frozen up. In open winters few cocks are to be seen ; so much so, that on the same ground on which I killed in one winter 175, and in another 200, the weather being severe,—during a very mild and rainy one I only killed 32 : however, in mild weather I don't believe cocks are much less scarce than in severe winters, but they are dispersed all over the mountains, and frequently in the thickest heather, and lie so closely during the day that they are not easily found. They seldom move in the daytime in fine open weather, their feeding time being night and morning, at twilight. I have occasionally found one or two on the tops of the highest mountains, amongst the rocks and heather, equally to my surprise and satisfaction, when in pursuit of a wounded grouse.

In favourable winters, throughout the greater part of the coast of Argyleshire, there is good cock-shooting. On the Isle of Jura it is good; on Isla, excellent. In the vicinity of Crinan, cocks are numerous, and breed in the woods belonging to the Poltalloch estate; from thence to Oban and beyond it there are also numerous first-rate cock covers. On the Loch Nell estate, about six miles from Oban, in the vicinity of Connel Ferry and Tinault and Cruachan, cock covers abound; and first-rate sport may be had during a severe frost, provided the tops of the mountains are covered with snow, for it is only under the influence of such weather that the cocks which are scattered about the country descend to the low ground and congregate in the covers. I and a friend some years since killed 105 woodcocks in a few days in the covers near Connel Ferry and Tinault.

Many of the covers are on the sides of steep rocky mountains, very difficult to be walked over, so that a number of beaters are required, as well as one or two good dogs, as cocks lie very close in hard weather: we had only three beaters, but two first-rate dogs with them, one a retriever and the other a cocker. There is scarcely any timber in these covers, so that if cocks would rise above the cover they would afford an easy shot; but this is rarely the case, as, owing to the thinness of the

cover at bottom, they fly under and through it, and are at their best pace the moment they are on wing, so that many shots are most difficult. The first chance is generally the best, and is too often the only one, as owing to the numerous projecting rocks and bushes surrounded by heather, round which they are certain to dodge the moment the opportunity occurs, they easily escape from your sight, and do not reappear till they are out of distance, so that a quick shot has a great advantage in this peculiar and most exciting sort of shooting. No larger shot than No. 7 ought to be used. The shootings of Loch Nell are extensive, comprising from fifty to seventy thousand acres of high and low land. Grouse and black game are not to be found in very large quantities, but partridges are numerous.

Game of all sorts would abound if the property were properly preserved. In the first place, the moors, which are extensive, are excellent, and on the low ground the covers are numerous and in every respect suitable for the preservation of black game, as they are surrounded by corn land. Some years ago, when I last visited this property, the ground was overrun with the enemies of game—a fact exhibiting itself in the numerous tracks of ground- vermin on the surface of the land in all directions, it being covered with snow at the time.

Martin cats, which are now rare in many parts

of Scotland, are frequently found here; and, in addition to ground- vermin, there was no lack of hawks.

A large sea-water loch runs parallel with this property for several miles, and affords excellent sea-fishing. There are several fresh-water lochs and streams on the estate, which abound with trout and afford good sport. Loch Nell itself—the loch from which the property derives its name—is a very large piece of water, remarkable for the size and excellent quality of its trout. This loch is also the resort of wildfowl in the winter. There are so many springs in it, that a good-sized stream issues from it, which empties itself into the contiguous sea-water loch, and salmon frequently ascend it.

The old family mansion was some few years since consumed by fire, and not having been rebuilt, the sportsman who rents these shootings must either take up his quarters at Oban, or at Connel Ferry, or at Tinault. At Oban there are several excellent inns; and at the two latter places small ones, in which there is sufficient accommodation for two sportsmen. The country about Tinault is beautiful and picturesque. On and in the vicinity of this estate sport of some kind or other may be had every day in the year.

A first-rate salmon river empties itself into the sea-water loch at the base of Cruachan, which is

one of the highest mountains in Scotland. The fishing of this river does not belong to the Loch Nell estate.

With regard to the cocks, it will be as well to mention that, during the severe weather in the short winter days, very few are found on those sides of large covers which face the north, those of south-eastern aspect being preferred. There is less snow in them; and in the event of the sun making his appearance, they have the benefit of it: but even in moderately severe weather more cocks will always be found in those parts of the cover which face the east and south than in those which face the north, which rarely receive a gleam of the sun during the short days of winter. The sportsman who wishes for good sport ought to commence at daybreak.

A particular friend of mine residing on the west coast of Scotland was eye-witness to so singular a circumstance in reference to woodcocks, that I am induced to relate it under the impression that it will not be unintetesting to my sporting readers. My friend left his house early in the morning, during a severe frost, for the purpose of woodcock shooting, and at the end of the plantation adjoining his residence flushed two, one of which he shot at and killed. On his return at night, he tried the same spot, under the idea that the one which had escaped him in the morning might possibly

have returned, when, to his surprise, three rose, affording him an easy right and left, of which he availed himself, and killed both. But if his surprise was great at flushing three cocks, it was considerably greater, on reaching the spot to pick up his birds, on finding a large piece of beef perforated in all directions by the bills of the birds. This he carried to the house, and found on inquiry that it had been brought into the kitchen by the cook for the purpose of dressing for dinner, but on her momentary absence from the kitchen had disappeared, and no one could tell or conjecture what had become of it, as no living thing had been seen entering the house. The mystery was, however, soon solved, as it appeared that one of the shepherds had been near the house about the time when the meat vanished, and it was conjectured that his dog had entered the kitchen, abstracted and departed with the beef, and carried it to the end of the plantation, and on being called by his master quitted the succulent spoil for the benefit of the cocks, who were too ready, in the midst of so severe a frost, to perforate any juicy substance which would receive their bills.

DEER FORESTS.

DEER-STALKING — DRIVING — DEERHOUND — CASTRATION
OF MALE FAWNS — VENISON — DOUBLE RIFLE.

THOSE large and extensive tracts of land on which red deer are preserved in Scotland, and which are called forests, are not, as might be supposed by the uninitiated in these matters, covered with timber, but, on the contrary, are frequently almost exempt from it. There may be, however, some few straggling trees and very considerable pieces of brushwood here and there, sufficient to afford protection and shelter to the deer in winter, and large enough for the preservation of black game, roe, &c.; but the forests generally are large tracts of land composed of mountains of different altitude, deep glens, and corries, well covered with heather, morasses and considerable patches of pasture intervening on which the deer feed. That these localities were formerly forests on a large scale, covered with timber, cannot be doubted, conclusive evidence of the fact being afforded by the nature of the soil, and by the number of trunks of large trees found buried underneath it. The soil which to a great extent pervades these districts, is composed of partially decayed vegetable matter; of leaves, bark twigs,

branches, and other component parts of trees. Some of the largest forests belong to the Earl of Dalhousie, Marquis of Huntley, Duke of Richmond, Duke of Athol, Duke of Sutherland, Duke of Portland, Lord Fife, and Lord Breadalbane. On the Marquis of Huntley's forest 1,000 head of deer may sometimes be seen in one herd. Besides the above-named forests there are those of Balmoral and Invercauld, as well as others on the western isles. So that these forests comprise many hundred thousand acres of land, a large extent to be devoted exclusively to deer, as no sheep are ever permitted to intrude. Sometimes grouse are not even protected, as their presence interferes with the success of deer-stalking, for which sport the forests are mostly preserved, the sport of deer-driving, which may be equally enjoyed, being quite a secondary consideration, for, though exciting, it is not so much so as stalking; neither is it so fascinating, as it does not involve the same amount of labour, difficulty, skill, perseverance and patience, and of anxiety, which may be said to be the parent of excitement.

In deer-driving, the exercise of skill as a rifle-shot and some amount of patience are alone required, as the deer are driven towards a pass in the mountains which the sportsman commands within a moderate distance from a concealed spot, so that he has merely to await the opportunity of

the passing herd to take the most deliberate aim at those stags which he selects as most worthy of his attention. The best stags generally come last, so that he must not be impatient. Contiguous to some passes, places of concealment commanding them are built of stone in the shape of a horse-shoe, with loop-holes through them, thus affording the sportsman who is supplied with two or three double-barreled rifles the opportunity of indulging his murderous propensity to a considerable extent. I am aware of one instance in which six shots were had under these circumstances from three double rifles, in which five stags were killed on the spot; the sixth, which was wounded, being subsequently captured by a deerhound. This happened on Lord Breadalbane's forest—the late nobleman being the sportsman who performed this feat. Any first-rate rifle-shot might simultaneously have had similar success with the same number of rifles from the same spot, as a large herd of stags and hinds passed at an easy distance. Stalking stags is quite another matter; the sportsman must work hard, sometimes crawl upon his hands and knees, exercise judgment, patience, and perseverance, before he can obtain even one shot, and that not always at his own distance, or from the position which he would prefer.

The numerous difficulties incident to deer-stalk-

ing constitute its charm and fascination ; and that it is more fascinating than many other sports may be inferred from the fact, that sportsmen who have taken to stalking, although possessed of the best grouse shooting, become so passionately attached to it that they frequently entirely abandon the latter sport. In the first place, the stag to be stalked must be discovered by the use of a good glass ; his precise position ascertained, and the best and surest way of reaching the nearest spot to him, from which a fair shot may be had, must then be discussed and decided on—for it is by no means an easy matter at all times to get within shot of a stag, although he may be in a recumbent position, as his head is always turned to the wind, and his sense of smell so acute that he would readily wind anyone at a long distance who attempted to approach him down wind. His sense of sight is also acute, so that the stalker must equally avoid coming within range of this faculty : in fact, the difficulties incident to stalking are endless ; so much so, that the best contrived plans of approach sometimes fail, and the longest amount of labour, perseverance, and patience may be unrewarded. Before attempting to approach a stag the direction of the wind must be attended to, and the possibility of any back currents considered, as these exist amongst the mountains as frequently as they do in large rivers and sea-

water lochs; but a highlander accustomed to the work is generally pretty well up in these matters, and can give the requisite information. If there be several stags together, one or two of them will invariably be on the look out, with their heads towards the wind. The least thing excites their suspicion; so much so, that too much caution cannot be exercised. A few grouse disturbed by the stalker, flying rapidly over some recumbent stags, would create alarm, excite suspicion, and frequently cause them to rise and move off; hence the cause of the non-preservation of grouse on deer forests, and hence the necessity of the greatest caution in every respect. The subject of dress is a matter of some import, and must therefore be entertained; for although the sportsman, as a rule, ought never to be within range of the stags' sight, if he can possibly avoid it, still it will sometimes happen that he cannot escape from being partially so, even when he is crawling on the ground, so that the colour least liable to excite attention by its contrast with surrounding objects is unquestionably the best. No dark colour is good; slate and light grey are about the best, and the whole dress should be similar in this respect—cap, coat, and trowsers. Stone, slate colour, or light grey, are not distinguishable at a long distance, and I believe will be found to be practically the best.

They afford little or no contrast to the rocks or heather. Sometimes when a recumbent stag is reached, he is not in a favourable position for a shot; and if the patience of the stalker be exhausted he will be naturally anxious to disturb him, without too much alarming him; hence a question arises as to the best manner of proceeding under the circumstances. An old and experienced stalker informs me he has frequently adopted the plan of placing his mouth near the surface of the ground, and then uttering a low moan with the greatest success; the stag, on hearing the sound, generally rises, but not suddenly, as if much alarmed, and then gazes about as if he were anxious to ascertain whence the noise proceeded before he may venture to depart, thus affording an excellent opportunity to the stalker of taking a most deliberate aim; the easiest and at the same time the most fatal shot is behind the shoulder. If this part be not accessible, and the head be sideways, then behind the ear—between the eyes if the head be immediately opposite to the stalker. All these are good objects of aim. The spine and brain are equally fatal parts if hit; but the heart presents a larger surface, and consequently offers an easier shot, and sufficiently satisfactory to those stalkers who are more desirous of killing to a certainty than of piquing themselves on the particular manner in which the result is arrived at.

In the event of wounding a stag, which not unfrequently occurs, a deerhound is required to pursue and bring him to bay ; if the hound be of first-rate quality and be laid on immediately, he will generally soon accomplish his task ; the best dogs for this purpose are the produce of the large wiry Scotch greyhound crossed with either the bloodhound or foxhound, as those of the pure breed of greyhound are seldom staunch at bay, and are also deficient in nose, whereas the produce of either of the crosses is invariably staunch at bay, and can be relied on. By crossing with either bloodhound or foxhound, you secure nose and courage and retain sufficient speed—in fact, all that is required. On these points I express myself advisedly, my opinion being corroborated by that of a first-rate sportsman, who has had ten years' constant experience with hounds of each of these breeds on a large forest, and having had each description under his control and management. It is generally supposed that a first-rate deerhound invariably pursues a wounded deer preferably to others, and that he never leaves him till he brings him to bay, although he may encounter other stags before he comes up with the wounded one ; this may sometimes be correct, but as there are instances of the very best deerhounds abandoning the track or scent of a wounded deer in favour of a fresh intervening stag, it may be reasonably assumed that when the wounded

stag is overtaken before he is able to reach a distant herd, he is preferably pursued, because he is first in sight—not that the deerhound will then abandon him for any other stag, but if some other stag had intervened before the wounded one had been reached, the former would have been pursued, and the scent of the latter quitted. The wounded stag once reached will not, however, be quitted by a first-rate deerhound till he is brought to bay, except the animal has sufficient strength and speed remaining to enable him to reach and get into a large herd, when he will probably escape, as the best deerhounds seldom or ever succeed in separating a wounded deer from the herd ; indeed, it is generally labour lost. The slight distinction to which I invite attention is for the purpose of showing that the sagacity of the deerhound is sometimes overrated. In support of this view I cite the following instance :—

A large stag had been severely wounded, and blood was on the ground where the shot occurred ; several minutes elapsed before a first-rate hound could be brought up and laid on the scent ; he went off at speed, and when the parties who followed him arrived at the top of the next mountain, they perceived him in close pursuit of a large stag, which was soon brought to bay and shot, but on examination proved to be a fresh stag, the wounded one being found dead on the

following day. The fresh stag in all probability rose before the hound when on the scent of the wounded animal, and was preferred ; proving that the best of deerhounds do not infallibly pursue the scent of a wounded deer, preferably to a fresh deer rising immediately in sight. Some persons entertain so favourable an opinion of the instinctive sagacity of the deerhound, that they believe he will not abandon the scent of a wounded deer under any circumstances. Experience is, however, the other way. The sportsman who has deer driven to him, and who has the command of several double-barreled rifles, may possibly be indifferent as to the use of the breech-loader, but this weapon will be invaluable to the stalker, who only avails himself of one double-barreled rifle, as an opportunity will frequently occur of which he can avail himself of reloading after an unsuccessful shot, in sufficient time to make a second trial of his skill.

A striking instance, as far as opportunity is concerned, of the advantage derivable from a breech-loading rifle occurred to a friend of mine ; of which he could not avail himself, having only a muzzle-loader. He was out grouse-shooting, when he espied three stags which had arrived on his moor from some neighbouring forest ; as chances of this kind occasionally occurred, he was in the habit of carrying a few balls in his pocket ;

he was using a copper-cap gun, from which he instantly drew the shot and substituted the balls; and leaving his dogs with the gillie, endeavoured to stalk the three stags; he could not approach nearer than 130 yards, and this position he reached only by crawling on the ground and lying as flat as possible; then finding he could not get one inch nearer, he thought he would hazard a shot, as he did not think there was any chance of the stags coming in his direction. He fired, but without success; the stags raised their heads and gazed about in all directions, and seemed for some time undecided which way to move, apparently not being aware from what quarter the shot proceeded; at last they advanced slowly towards the spot where the stalker lay in concealment, till they came within twenty yards of him, when he rose and took a deliberate aim at one and killed him. Now, if he had had a breech-loader, he could easily have reloaded the empty barrel which he had in the first instance unsuccessfully discharged, and had a right and left at two of the three stags, and as easily have killed two as one, as he was a first-rate shot—lying flat on the ground in heather, which was not deep; it was impossible to reload a muzzle-loader without being seen, but with a breech-loader there would have been no difficulty.

For those who like to indulge in considerable

slaughter, Lancaster's four-barreled rifle would be a luxurious instrument to use, in the event of a large herd of deer being driven past at a convenient distance. For moderate appetites his double-barreled rifle will be found to answer sufficiently well. Lancaster's cartridges cannot be refilled: whereas the Lafanchaux cartridges can be refilled three or four times. Moreover, the Lafanchaux rifle is in every respect as efficient; it is equally strong, and is without any complication, and I know of no double-barreled rifle which surpasses the one made by Lang, and which is more generally approved of not only by the deer-stalker, but by the Indian sportsman, whose attention is sometimes directed to a more formidable and much more important quarry than deer, and when the facility and dispatch in reloading the breech-loader are sometimes available for the salvation of life. The strong binding power of Lang's improved lever renders this weapon as safe and efficient as it is possible to be made; and his judicious arrangement of the relative positions of the two barrels to the line of sight is such, that they carry to the greatest accuracy to any given distance: within and beyond that given distance it will be necessary for the sportsman to exercise his own judgment, having a fixed principle for his guidance.

The difficulty of arranging the relative posi-

tions of the two barrels of a double-barreled rifle arises from the effect of the recoil, which, taking place at the moment of combustion, gives a slight external tendency to the barrel from which the discharge occurs before the bullet has escaped from the muzzle; so that if the axis of each barrel were parallel with the line of sight which lies evenly between them, any object at a long distance, at which a strictly accurate aim were taken, would not be hit, as the bullet from the right barrel would deviate slightly to the right, and the bullet from the left barrel to the left of the object aimed at. It has therefore been found necessary to give to each barrel a slight internal tendency, by which means the effect of the recoil is partially counteracted; and here the skill of the gunmaker is called into exercise, as it is by a nice arrangement of the degree of convergence that the line of trajectation is made to intersect the line of sight at a given point. This may be fixed at 150, 200, or 250 yards, but it cannot be made to intersect the line of sight at each of these distances, because, the axis of the barrel not being parallel with the line of sight, there can only be one point or distance at which the line of trajectation can intersect the line of sight: beyond and within this point, as I have before intimated, the sportsman will have to exercise his own judgment. The subject admits of easy mathematical

demonstration. Some gunmakers will tell you they can make their rifles to carry with strict accuracy to all distances ; but this is impossible, being mathematically untrue : it is in defiance of the fact of the recoil taking place at the moment of combustion, and of its inevitable consequences before the bullet leaves the muzzle, when the rifle is discharged from the shoulder ; but if they make their experiments from a vice in which the stock is so firmly fixed that the effect of the recoil on the direction of the muzzle is counteracted, they resort to a test which is fallacious, and are deceiving themselves, and must subsequently disappoint the sportsman, as a double rifle, which might carry with accuracy from an immovable and fixed position, would infallibly prove altogether faulty when fired from the shoulder, for the reason which I have already given. With regard to elevation, the degrees are ascertained by experiments, and the sights arranged with so much accuracy and precision, that there can be no mistake.

To Lang the sporting public are considerably indebted, as he was the first who improved the original Lafanchaux to such an extent as to bring it into notice, and render it worthy of general acceptance. In fact, till Lang produced his improved specimen of this principle a breech-loader was not only considered a very inferior but also

a very unsafe weapon. Lang's snap gun is as good as any of the many which have recently been brought out of this description, and commends itself especially to the attention of all sportsmen who can afford to indulge in a variety of weapons, as the process of loading can be accomplished with much greater ease and dispatch than with the ordinary Lafanchaux, and in the field will be found to be equally effective. For the use of sportsmen who can afford to have only one gun, the improved Lafanchaux must be preferred, in consideration of its extreme simplicity, and of the superior strength of the lever. And of this class I have seen no gun which pleases me so much as one made by Martin of Glasgow, with disks to fit closely into the breech-end of the barrels, and with one of the simplest but most powerful levers now in use. This principle would, I should think, answer thoroughly for either the single or double rifle, as no movement of the barrels, independently of the stock, is possible, so great is the binding power of the lever combined with the closely fitting disk, and moreover little or no escape of gas is possible. Martin is himself practically a gunmaker, and thoroughly understands the principle on which a double gun or rifle ought to be constructed, and therefore the result with him is a matter of comparative certainty, and not one of chance, as is frequently the

case with some gunmakers in their construction of the double rifle. Martin's price is moderate; his materials and workmanship are first-rate.

EMASCULATION OF FAWNS.

In some of the large deer forests in Scotland the foresters castrate as many young male fawns or calves as they can discover. The places in which the hinds have and conceal their young are in deep heather, and as they quit these places at daybreak the forester must be on duty in concealment, with a good glass, long before sunrise. The hinds do not return till night, but remain in a recumbent position after they have fed within a short distance of their young: so that at early morn is the only chance for the forester. The operation must be performed with the greatest care, so that no particle of that which is withdrawn, or drop of blood, be on any account allowed to touch the heather. Even when every precaution is taken, the hind will not return immediately to the spot; her sense of smell being so acute that she is readily aware that some one has been there.

The operation of emasculation of fawns is similar to that performed on lambs. An emasculated fawn has no horns; and if the operation be performed after horns have made their appearance at

any age, no alteration in them ever subsequently occurs : they neither grow, fall off, nor are removed, but remain precisely in the same condition. The venison of the emasculated deer is far superior to that of the ordinary stag ; and if it had the fat of the fallow deer, would be far better than a large quantity of strong coarse stall-fed venison which is sold in London.

If the operation above mentioned were performed more frequently than it is on the young males of the fallow deer, a very great improvement in the quality of the venison which is produced in some parks would very possibly take place, as it is frequently of so strong a flavour as to be uneatable, and not to be mentioned or compared with the best quality of red deer, of which I have often partaken in Scotland. I do not contend that the best quality of fallow deer, in consideration of the excellence of its fat, is not generally superior to red deer ; but, on the other hand, good red deer venison, when in first-rate condition, is incomparably superior to a large quantity of the coarse strong stall-fed fallow deer venison sold in London. Indeed, I have tasted red deer venison quite equal to any fallow deer venison, as far as the flesh is concerned, and fallow deer that was not eatable. For the guidance of the young stalker, I should mention that, to ensure the good quality of his venison, he must

take care that any stag which has fallen to his rifle is bled as soon as possible, then opened and emptied, or, in sporting language, gralloched. It may then be covered over, and left till it be convenient to send for it. For the further information of the sportsman, it may perhaps be as well to mention the different terms which are applied to deer of different ages. The young ones under one year of age, both male and female, are termed calves. One year old male, a brocket; a three year old, a spire; a four year old, a staggart; five and six years old, stags. A young female after one year is called a hearst; at three years old, a young hind; castrated males are called steers or hevers.

The impression or tread of a deer's foot is called his slot; his haunt, his lair; where he lies down, his bed; taking water is called going to soil—and this he frequently does when wounded and pursued by a deerhound; and then, from the great length of his legs, he has a great advantage over the deerhound who is attacking him.

A stag older than six years is called a hart.

Deer shed their horns annually in the spring of the year, about April.

The shedding of them lasts three months; their renovation consumes about a similar amount of time.

The horns become gradually loose till they drop

off entire, but not always simultaneously, although there is sometimes a very short interval between the shedding of one and of the other antler. This gradual loosening of the old horns is produced by the progressive internal growth of the new horns, which forces them out of their sockets, so that at last they fall by their own weight, the tops of the new horns being slightly prominent.

This effort of nature to get rid of an incumbrance is sometimes witnessed by the foresters who are on duty. One antler has been seen to drop a few minutes after the other, merely on the stag's sudden movement of surprise occasioned by the fall of the first: sometimes two or three days intervene before the second antler falls off. These interesting facts in reference to deer in their wild state fall only within the range of the attentive forester's observation; but he has interest in the matter beyond that which arises merely from the gratification of his curiosity, inasmuch as the horns which are shed, and which fall to his lot, are not without their value. A pair of horns of large dimensions are sometimes from ten to twelve lbs. in weight.

Rutting generally commences about the 1st of October, exhibited by the swelling of the necks of the stags. Period of gestation of the hinds is eight months. All the calves found by the foresters, I should mention, are marked in a particular man-

ner, so as to admit of their being subsequently identified. The barren hinds, when fat, are excellent, and generally come into use in the winter months. Spaying the female calves is sometimes practised, but not to a great extent; the operation not being absolutely necessary, its propriety may possibly be questioned. An objection also may be urged against the emasculation of the males, but the practice seems to have received the sanction of all ages; and with regard to many other animals, in consideration of the numerous important advantages derived from the practice on them, the operation may be considered justifiable; indeed, the world could not be supplied with the necessary amount of wholesome food without it. When a similar operation was performed on the Chapter of Suez and on their newly-elected bishop, by the command of Pope Gregory, simply because the Chapter had carried the election into effect without his authority, Gibbon philosophically remarks, that of the cruelty of the act they might justly complain, but not of the loss, for having made a vow of eternal chastity to Heaven, they were, in fact, only deprived of a superfluous treasure.

Now, with regard to the varieties of animals which are specially reserved for the food of man on whom this operation is performed, the removal in question is not of a treasure, but of a noxious

superfluity; hence its justification. In many parts of Australia, where considerable traffic in cattle takes place—so much so, that several hundreds are purchased at one sale—this operation is practised to a great extent on both sexes, and irrespective of age; consequently some of the most advanced in years succumb, but not more than three per cent. When six or seven hundred cattle are purchased at one sale, the practice is to select a few of the best for breeders, and to subject the remainder to the deprivation in question.

After the selection has been made, the remainder of the herd is brought up into close quarters, in a position arranged for the purpose, and each animal is driven through a narrow pass, where the operator is stationed ready to perform his duty: each operation occupies about three minutes. When this ordeal is over, the cattle are driven to the pasture where it is intended they should remain. Two objects are attained by this process; in the first place, the cattle, which would otherwise roam to a distance, are indisposed to move from the ground on which they are located, and soon become reconciled to it and remain perfectly tranquil; and in the next place, they more speedily become in sufficiently good condition to be sent off to the market. A quantity of mutton is sometimes sent to the London market which has not undergone this salutary process, the animals being from fif-

teen to eighteen months of age: this is easily distinguished by the whiteness of the flesh and by its strong disagreeable goat-like flavour. By the omission of the usual process, a more marketable animal in size and substance may possibly be secured at an earlier age, but of decidedly inferior quality. Good mutton is easily distinguished from the bad by the practised eye, the colour and grain of the flesh being different. The flesh of old wether mutton is dark and of fine grain. The flesh of young mutton is pale, and when cooked almost white. Mutton to be really good and of first-rate quality ought to be four years old, and, of course, wether mutton; and when of this age the Southdown is not to be surpassed by any other breed, not even by the highly-famed Welch.

In the London markets at the present day very few wethers are sold which have even reached two years of age, which fact may explain why so much mutton of inferior quality is constantly met with and justly complained of. But good mutton can always be had by those who know the good from the bad, and who will take the trouble to search for it, as amongst the large quantity of young mutton there is always a certain proportion of excellent old wether, in the shops of some few first-rate butchers, reserved for those who scrupulously avoid the bad, and who have no objection to pay a little more for the good. Those who are indif-

ferent on these points, and who are not aware of the difference between ewe and wether mutton, between young and old, and who receive whatever the butcher chooses to supply them with, as a matter of course get very indifferent meat. The butcher and the wine merchant very soon discover those customers who are deficient in taste, and supply them accordingly; and bad wine very frequently accompanies inferior meat.

THE ROE AND ROEBUCK.

THESE elegant little animals abound in many parts of Scotland, and are to be found in woods and plantations. As they are by no means wild, they can very easily be killed, either by having the woods and plantations driven, several guns having been previously placed in the passes (which are generally known to those who are acquainted with the covers); or they may be hunted by one or two couple of hounds, and waited for at their pass as they come round; but, in my humble opinion, it is most wretched sport. They lie so close at times, that you may come within a few yards of them before they will rise; so that you may shoot them easily with small shot.

When out woodcock shooting I have shot them

with No. 6 ; but this can only be done when you can get a near side-shot, and are able to hit them behind the shoulder. When they are going directly from you they are not easily killed, even with large shot; and ought not to be shot at, unless you have dogs to pursue them. The shot generally used by amateurs is BB, with which you may kill them at seventy or eighty yards, if you can get a side-shot. If the country were rideable, I should think, with a pack of harriers, they would show excellent sport.

They are tolerable eating, the flesh being sweet and tender ; but they are never fat, and, in my opinion, very inferior to good mutton. The *cotelettes* are, however, very good, and the haunches, if larded, are eatable with a *sauce piquante*. The other parts are good for soup, which I rather fancy is the best purpose to which they can be applied. The roe is in rut from the end of October to the middle of November ; and, as they go about five months and a-half with young, they generally produce about the end of April or beginning of May. They sometimes have two young ones. The roebuck sheds and renews his horns every winter, and in March he may occasionally be seen rubbing them against trees, in order that he may get rid of the skin which covers them. In the second year he has two or three antlers, on the third four or five, and never more. There are a great

many roe in France in the royal forests; but particularly in Brittany, where the woods are very extensive.

DOGS.

Good sport in all wild open countries depends so much upon good dogs, that to secure them ought to be a primary consideration with every sportsman. Little trouble and exertion are required for this purpose; and as good dogs occasion no more expense than bad ones, it is a matter of surprise that the latter should be so frequently in use as they are.

In the first instance, every beginner must buy his dogs; and there will be no difficulty in his purchasing good and well-bred ones, provided he will give a fair price. After this, the best plan will be to breed and break them; and well-bred dogs are easily broken if the proper means be adopted. Never, upon any account, buy dogs without a trial, unless you receive the most unquestionable guarantee as to their excellence. A pointer or setter may be broken at eleven or twelve months old. In breeding, take care not to breed, as it is called, 'in-and-in,' that is, from dogs nearly related one to another, as the produce is generally feeble and deficient in courage;

rather send to any distance to breed from a dog not related, selecting for your cross a well-bred and well-made dog, and one possessing first-rate qualities. A good working dog, with good temper, first-rate nose and stanchness, good legs and feet, and breadth of chest, is one not likely to disappoint you. Work, in my opinion, is the first consideration, as all other good points, however excellent they may be, will be of little value without this quality; but there will be no difficulty in obtaining all you require if you will only give yourself the trouble to make the proper inquiries; and the satisfaction and pleasure derivable from the possession and use of good dogs will be an ample reward for any exertion or pains you may have incurred to secure them.

As to breaking dogs, when they are about eleven or twelve months old, or perhaps earlier, as circumstances may suggest, let them be brought home from their walks and shut up in a kennel, or fastened separately to dog-boxes; and let the person who is to break them take them out every day for two or three hours, so as to become thoroughly acquainted with them and on friendly terms with them; in fact, to be with them as much as possible; for more is to be done with all dogs, both young and old, by kind treatment, than by severity and harshness. Then let him endeavour to make them thoroughly docile and

obedient; to know their *names*, to come instantly to call, to drop immediately to hand. When this is accomplished, he may show them game with an old, steady dog. It is better, at the commencement, only to take one young dog out at a time. If he be very high-spirited, wild, and inclined to chase and run in, then put on a spike collar with a long cord to it; and when you perceive him disposed to advance too rapidly, put your foot upon the cord. This check, administered a few times, will make him cautious and careful. Should he be very wild and disposed to run riot, and get out of your reach and chase game, do not flog him; but have a boy to hold the end of the cord, and check him every time he attempts to advance on your old dog, who may be either standing or drawing upon game; and this will be a sufficient and effective punishment.

In this manner I have broken the wildest setters in a week or ten days, without much interference with my sport, being out every day, and killing much game. When a young dog has felt the spike collar* once or twice, he becomes cautious, and will keep close to you; and thus, as you advance to your dogs drawing on game, or pointing at it, the young dog is afforded every opportunity of learning his business, and the boy in the rear with the cord in his hand prevents all

* In French, 'collier de force.'

interference with your sport, and will be ready to make him down charge every time the gun is discharged, by giving him a smart jerk with the cord should he attempt to dash forward, and repeating the same till he goes down to charge properly. When broken in this manner, dogs become very stanch, and seldom require subsequent correction; and it is a far easier and shorter method than without the gun, especially if they have received, in the first instance, that preliminary instruction which I have suggested.

Dogs taken into the field before they have learnt obedience in any shape or way, are much more difficult to be broken; it is, in fact, beginning at the wrong end; the whip is brought into action, and much severity resorted to; and this is frequently done by keepers who do not understand their business. Give dogs plenty of work, kill game to them, and be particular not to overlook any fault, and you will have no trouble with them: if you have commenced properly with them in the first instance, you will then find them quite ready to down charge, back, and do all that is requisite. The above is the main secret with regard to making good dogs, and keeping them so. The best of dogs, shut up in a kennel, and only worked occasionally, will commit faults, especially if they do not know the person well who shoots to them.

You cannot be too particular as to making dogs *down charge*; this is so essentially necessary to ensure good sport, that it must never be overlooked or lost sight of; it is the first act of obedience, upon which all others are founded. The sportsman will, of course, on no account stir one inch after having discharged his gun, till he has reloaded it. No dogs will *down charge* well if *this* rule be not *strictly* attended to. A good sportsman will rather lose fifty birds than move. Want of attention to this fundamental principle in shooting, on the part of impatient and over-eager sportsmen, I believe to be the fertile cause of accident; and it is at the same time subversive of sport, and almost invariably defeats its own object.

The more work you give setters, the better they will generally behave; at least, I have always found it so; and having shot many thousand head of game to setters, I have a great partiality to them. For general work for all seasons and all weather, I prefer them infinitely to pointers; they are much more hardy, will do more work, and are not so liable to become foot-sore or chafed by the heather as high-bred pointers; neither are they subject to be chilled in cold weather. If the weather be hot, dry, and sultry, then it must be admitted that pointers have the advantage on the hills; but there is rarely a lack of moisture on the moors. The best plan for those who can

afford it, is to have both pointers and setters, and work them alternately, as circumstances may suggest. Three days a week are sufficient for pointers ; but setters may be worked almost every day if you get the right breed. It must be borne in mind that there are many different breeds of setters, varying in size, shape, colour, and quality, but more particularly as to their speed and endurance. There is a large, heavy breed, very steady and stanch, with good nose, but almost useless on the moors, being incapable of fatigue, and very subject to lameness in the shoulder. This breed is, of course, to be scrupulously avoided. They are generally of a red and white colour. I do not mean to say that all setters of this colour are of this description, as I have met with some first-rate dogs in every respect, red and white, but they have always been large.

The breed I have found best in every respect is a light-built, small setter, with long, smooth, silky hair, much feathered about the legs and under the tail. I had this breed for many years. Many of them were quite black, with the exception of a white spot under the neck and at the tip or end of the tail. Their produce was black, black and white, and dark red ; they had capital legs and feet, and were very broad in the chest. No day was too long for them ; and when in their prime, they could work every day in the

week, and I never recollect them either foot-sore or lame. They were remarkable for stanchness as well as speed. Some of them invariably dropped when they found their game, others pointed and only dropped occasionally. Some that I bred backed one another instinctively the very first time I took them out, before a head of game had been killed to them, and gave hardly any trouble in breaking.

I once shot over some setters, many years ago, which came from Sir John Shelley's, the very best I ever saw. They were very fast, most indefatigable, had capital noses, carried their heads well, and found their game at a very great distance. These dogs could hunt every day, and no day was too long for them. They were large, but beautifully made and very handsome; colour, black and white; much feathered about the legs and tail. Dogs of this description are more suitable for grouse shooting than for any other sport; in fact, their speed is thrown away in field shooting, except it be in those districts where the fields are from fifty to a hundred acres; but pointers, perhaps, are better calculated for partridge shooting, as they hunt closer and more cautiously than setters, the latter being apt occasionally to run over birds if too fresh, and not kept under by sufficient work, especially when they are young.

For pheasant shooting, where they are thin, and not over-preserved, so as to make dogs not requisite, there is no dog equal to the Sussex spaniel; but in these times of preserving, pheasants are generally so numerous, that a few beaters and a retriever are all that are required. In strong covers, furze, or thick hedge-rows, spaniels afford excellent sport; very little game escapes their close hunting and excellent noses, but a relay of them is necessary, as they will seldom work throughout the day, especially if the covers are strong and thick, and a little wet at starting in the morning, and they take so much more out of themselves than any other dogs at the commencement of the day, being more eager and vivacious; their subsequent melancholy aspect when done up towards evening, affords a very striking contrast to their lively and sprightly appearance in the morning. For woodcocks there is no dog equal to them. A steady old pointer or setter may be made good for cocks, but they will never find half the quantity that spaniels will flush. This I have found from experience, having tried both on alternate days in a good cock country, the result being always most decidedly in favour of spaniels. No bird lies closer than a cock when he is not wild; consequently, a low-scented, close-hunting dog must have the advantage, in addition to his inferior size enabling him to get under bushes and

other places where a pointer or setter, even if disposed, could not so easily pass ; but close as wood-cocks lie on particular days, they are sometimes very wild ; and when this is found to be the case, it is advisable to beat down wind as much as possible, otherwise you may not get a shot.

When dogs are working hard, it is of the utmost importance to have their food ready for them immediately on their return home, as they will then eat with appetite what they require, before they get upon their benches ; whereas, were the food not ready, they would retire to their beds, and be indisposed to move even when the food was brought ; and if forced from their benches, would soon return without eating half the quantity requisite. The consequence of this neglect and inattention, if persisted in, would be a falling off in condition, and inability to do regular work. Some dogs are very shy feeders, and require much attention on the part of those whose duty it is to take care of them ; and it will be frequently necessary not only to feed these alone, but to humour and coax them, and sometimes feed them with the hand. By the neglect of this care and attention many a valuable dog is lost, the feeder being indifferent about the condition of his dogs, and merely placing the food in the kennel, leaving each dog to take his chance. The sportsman must either *see* his dogs fed himself, or have a

trustworthy person to look after them ; otherwise, he will meet with serious disappointment.

Dogs are easily kept in good condition, by judicious and careful management ; but, when once neglected, quickly fall off, and do not readily regain condition. There is no part of a keeper's duty to which the vigilant eye of the master ought to be more constantly and unremittingly directed than that which involves the feeding of his dogs and other minor attentions to them ; such as cleanliness of the kennel, a constant supply of clean water, and dry clean straw. Upon attention to these particulars depend their health, strength, and efficiency in the field. The unwholesome atmosphere of a dirty, neglected kennel, must impair the sense of smell ; hence the necessity of the greatest attention to cleanliness where pointers and setters are concerned, their efficiency depending so much upon the organ of smelling, and its healthy condition.

If a dog returns home apparently tender upon his feet, they should be washed with warm pot-liquor. If a foot be sore, the dog should on no account be taken out till he be quite recovered ; a few days' rest, which is the only certain remedy, with the assistance of his own tongue, which is more healing than anything that can be applied, will soon restore him ; if, on the contrary, you persevere in working him, you may lame him to

such an extent that he may be useless for weeks. When the soreness is slight, and you cannot manage without the dog, a boot may be tried; it must be made of thick, soft, pliable leather, fastened by a lace. I have known many a dog work well in this manner without injury to his foot. The only difficulty is to fasten it in such a manner that it will not come off. Cessation from work is, however, the only safe plan; the opposite course frequently not only produces protracted lameness, but fever and general disability. Stimulants are sometimes used with effect in incipient cases, but will be of no avail except accompanied by rest. The stimulants usually recommended are sulphate of zinc, which may be used alone in a diluted form, or oil of vitriol, with some tincture of myrrh.

DISEASES IN DOGS.—THE DISTEMPER.

ALTHOUGH there are many elaborate works on canine pathology containing all necessary instruction as to remedies, cure, &c., so that any remarks on the subject by a non-professional person might appear superfluous, still as a work on shooting might be considered incomplete which did not contain a few remedies for some of the most pre-

valent and troublesome complaints to which dogs are liable, I will afford such information as I possess, accompanied by remedies which I have found, from long experience, to be most successful. With regard to the distemper, I can however offer no certain remedy, neither do I think that any has been discovered, although many persons profess to have an infallible specific. This disease is as fatal to young dogs as the small-pox used formerly to be to children before the invaluable discovery of vaccination was made by Dr. Jenner: it is, however, more partial, being more fatal to some breeds of dogs than to others. The greyhound suffers severely from it, and is with difficulty reared, requiring the utmost skill and the most unremitting and constant attention during the progress of the malady.

Another characteristic of the disease is its being more severe in some seasons than others; and this peculiarity is applicable to a whole district, so that it appears in the light of an epidemic. I have lost many young dogs from it, especially greyhounds, and never had the good fortune to find any medicine on which I could rely with certainty. Vaccination has been recommended as a preventive, and many affirm having tried it with complete success: the precaution might therefore be resorted to; for, if it does not completely succeed, it may render the attacks of dis-

temper less violent ; it is, at all events, worth trying, as it demands but little trouble.

Although the distemper presents itself in various forms and in different degrees of virulence, still there are always present certain infallible characteristic symptoms ; and when those exhibit themselves, some remedies ought instantly to be resorted to. If in the winter, the dog ought to be kept in some dry, warm, comfortable place, and immediately separated from his companions, as it is unquestionably contagious, although there may be an occasional exception. The first symptoms are general heaviness of manner, loss of appetite, and want of energy and spirit, so that when spoken to the dog hardly notices you : this is accompanied by a dulness and weakness of the eyes, and subsequently a certain huskiness of the throat comes on, with cough,—all symptoms indicative of incipient inflammation,—followed by a discharge from the nose. It generally comes on in the spring of the year, and attacks dogs between 8 and 11 months of age.

In the first instance I should recommend an aperient in the shape of castor oil : a supply of 'lap' ought to be at hand, to be given in small quantities, but frequently. If the disease advances, then strong remedies may be resorted to, and there is none better than one recommended by Dr. Taylor of Yarmouth,—gum gamboge, 20

grains; white hellebore powder, 30 grains—made into nine pills, and one given every morning. This is a very strong and powerful medicine; and as hellebore partakes in some degree of the dangerous character of calomel, every care must be taken that the dog be not exposed to cold or damp. The dog's food ought to be some warm liquid—either gruel, broth, or milk. It will be well to vary these, increasing the strength of the food as the dog improves.

As there is a great deal of inflammation attending the disease, especially of all those membranes which produce mucus, the stomach will be constantly overloaded, so that the dog will find a great relief from an emetic being administered: the ordinary one consists of equal portions of calomel and tartar emetic, one grain each, more or less, according to the size of the dog. Sometimes common salt will answer every purpose. A Frenchman told me he had cured a dog of his by giving him a quid of tobacco occasionally, with plenty of warm broth; the tobacco operates both as an emetic and as a purgative; but what would answer in one case might fail in another.

The general remedies which I suggest are constant care and unremitting attention: if in winter, warmth and cleanliness at all times, cooling medicine, gentle emetics, plenty of nourishing liquids, increasing in strength as the dog amends.

Calomel may be given, from 6 to 8 grains, dependent on the size of the dog: this should be given at night, and on the following morning some castor oil, with or without some syrup of buckthorn with a little jalap in it, as circumstances may suggest. But rhubarb may be given with the calomel, in which case no further aperient will be required on the following morning. In proportion of 3 to 1 grain of calomel, this remedy, in moderate occasions, will sometimes succeed with the aid of a gentle emetic. No man who keeps dogs ought to be without castor oil and syrup of buckthorn: they are both most useful, and at the same time most safe remedies; and there ought to be an extra quart of syrup of buckthorn, with an ounce and a half of jalap in it. A tablespoonful of the latter, with a spoonful of castor oil, is the best and safest medicine that can be given to a dog at any time. Nothing is better for pointers and setters before the commencement of the shooting season.

There are numerous symptoms of a more violent and desperate character, which succeed to those I have mentioned, when the disease is not arrested in its progress by ordinary remedies, so that the dog appears to be almost mad, has fits, foams at the mouth, and will attempt to bite any person who approaches. When these supervene a dog is rarely saved, so that I will make no

attempt to prescribe for those extreme cases, but refer those of my readers who are curious on the subject to the several elaborate treatises which have been published by scientific writers on Canine Pathology. It will be sometimes necessary to use a lotion for cleansing the dog's nose, in which case $\frac{1}{2}$ oz. of sugar of lead, dissolved in a pint of water, may answer the purpose. Mr. Beckford recommended Turbith's mineral being given in increased quantities on three successive mornings, viz., 8, 16, and 32 grains; this remedy must be accompanied by a plentiful supply of warm broth. It is asserted by those who have written on Canine Pathology, that dogs are subject to the distemper two or three times; I can only say, I never knew an instance of even a second attack on a dog advanced in age.

MANGE.

As one receipt is as good as a thousand, if it be an infallible one, I will give only one, which I have never known to fail, even in the very worst cases. It consists of 6 oz. hellebore powder, 12 oz. sulphur vivum, 2 oz. spirits of turpentine, 1 quart of train-oil. Two or three days before this application, some sulphur and antimony ought to

be given, or even sulphur alone, and as much milk as possible, with oatmeal porridge, but no flesh or greaves. This mixture must be well rubbed in with the hand, under the shoulder, and upon the inside of the dog's thighs. It ought to be applied in the morning, upon an empty stomach. If administered after a dog has eaten, it will immediately make him sick.

As it is a very powerful remedy, and acts upon the system, the dog must be kept warm and dry, and not exposed for several days. The effect of the dressing will be visible for two or three days subsequently. On the following morning, a dose of castor oil and syrup of buckthorn may be given, and the dog ought to have some broth instead of his usual food. If some whey can be had, it is one of the best things you can give a dog after being dressed for the mange. The aperient dose may be repeated after an interval of two days; or equal portions of sulphur and nitre may be given, if it be preferred; or merely sulphur,—a table-spoonful, in some warm milk, being a very cooling medicine. I have seldom found two dressings necessary, except in very bad cases.

To keep dogs clean during the summer months, sulphur, with antimony, ought frequently to be given in their food. It is also a good plan to cut up a cabbage, and boil it with the flesh or greaves twice a week. Dogs are fond of this, and when

they are doing no work it is most beneficial to them; and even when in work in the autumn, once a week would do good, especially when much flesh or greaves have been given with the meal. A few handfuls of salt must invariably be thrown into the boiler whilst the food is preparing.

In mild cases of the mange, brimstone alone will effect a cure, especially if plenty of milk can be had, and the dog have nothing in addition beyond oatmeal porridge. A tablespoonful twice or three times weekly will suffice.

WORMS.

Dogs are subject to three different descriptions of worms, all bad and adverse to health and good condition. The tape-worm is the most injurious: there are two others, called ascarides and teres.

The moment either of these are discovered they ought to be dislodged, as no dog can remain in condition, and do his work, whilst he is infected by them. To the practised and experienced eye of the vigilant and attentive sportsman, the altered appearance of the dog's coat soon discloses the presence of the enemy, if it has not been discovered in any other way. A good dose of castor oil, upon an empty stomach, will sometimes dis-

lodge and remove them. Two large tablespoonfuls, in a basin of warm milk, I have known to have the desired effect,—the dog, of course, kept fasting for a few hours subsequently. If this does not succeed, then powdered glass or tin-filings may be tried, as much as will lie upon a sixpence, rolled up in lard or butter. Should these fail, then I can recommend a more potent remedy, which has never disappointed me; and that is spirits of turpentine. Two teaspoonfuls of this, on an empty stomach, will kill and remove worms of any kind. This may be given in a small bladder—a roebuck's, for instance. The quantity is introduced into the bladder; and this being fastened, and then well oiled, is easily slipped down a dog's throat, one person keeping the dog's mouth well open, with the tongue out, the other administering the remedy. If no vehicle in the shape of a bladder of any kind can be found, then give the turpentine in some oil of olives. The dog ought to be kept fasting for ten or twelve hours: after this let him have some broth. Two days subsequently, there will be no harm in giving some castor oil and syrup of buckthorn. The powder of the Areca nut I have found an infallible remedy—about a teaspoonful will suffice: it must be given in warm broth well mixed, fasting; it will not be taken when cold as it is bitter.

FOOD FOR DOGS.—THE METHOD OF
PREPARING IT.

THE food generally used for hounds is oatmeal or barleymeal, with horseflesh. The former is preferable, being of a less heating quality, and cheaper. They require preparing in a different manner. Oatmeal requires boiling, barleymeal scalding. If the former be made with care, and in the proper manner, there will be a great saving in meal, and the food will be more nutritious than if it were made carelessly and in haste; and as the manner in which it has been prepared can easily be detected by the master's eye, I will state how the porridge ought to be made, and the appearance which it ought to exhibit when properly manufactured, together with certain infallible indications when it has been carelessly made. These particulars, trifling as they may appear, will interest those who take a pleasure in looking after their dogs themselves.

In the first place, if flesh is to be used with the meal, it ought to be boiled in a boiler of sufficient size to hold food for two days' consumption of the kennel. If joints are to be boiled, the bones ought to be broken in several places before being put into the boiler. When the flesh is thoroughly boiled, the bones, and those lumps of meat which are not reduced to pieces, may be

taken out with a flat iron, open at intervals,—i.e. a strainer,—the remaining bits to be reduced to shreds with a sort of iron rake. When this is done, if the soup boils again, but not before, the oatmeal may be sprinkled in gradually, the maker continually stirring the whole with a small instrument made specially for the purpose. He will persevere in this operation till he finds the porridge sufficiently thick; and if it be perfectly made, and the flesh properly distributed, which will be visible by the glutinous and gelatinous appearance of the surface, the fire may then be withdrawn, and the food left to cool; but after the fire is withdrawn the stirring process must be continued for at least ten minutes, to prevent the porridge near the bottom from being burnt.

The quantity required for the day's consumption may be removed in a few hours, and placed in the feeding-troughs to cool. The remainder, if kept covered by the lid of the boiler, will be sufficiently warm for next day's use. If the porridge be properly made, it will be thick, glutinous, and of equal consistency, free from lumps, and, when cold, can be cut out with a spade or shovel, kept for the purpose. If this glutinous character be wanting, and there be lumps of meal, you may conclude that the porridge is badly made, having been manufactured carelessly, and in haste; the

meal having been thrown in in large quantities, whereby the mixture is not only not so nutritive, but one-third more meal has been employed than was necessary.

To prepare barleymeal, the soup, after having been made as that above mentioned, must be poured, when boiling, upon the meal, stirring it, at the same time, till well mixed; when this is done, it may then be left to cool. It will swell and increase considerably in bulk, if it has been properly made. The feeder ought to take care to mix the flesh as equally with the meal as he possibly can. The lumps of boiled flesh which have been removed from the boiler may be reserved for those dogs which may happen to be low in condition, or who are bad feeders. Any large lumps adhering to bones, not wanted, may be reboiled. Where there are many dogs in a kennel, great care must be taken that no bones get accidentally into the food, as these would produce quarrels and fights, and serious consequences.

The shy feeders, and those in low condition, ought to be fed alone, before the other dogs are allowed to commence. In a kennel of hounds each hound is called in by name, according to the judgment of the huntsman and feeder, and the utmost discipline adopted in this respect, otherwise his whole kennel would be in a state of confusion. If hounds were fed *ad libitum*, many

would be overfed, and others half-starved. The effective management of a pack of hounds in the field is much influenced by the good discipline which is maintained in the kennel.

There is a wonderful difference in the feeding of dogs. Some are so voracious and expeditious, that they fill themselves in two or three minutes, so that they can scarcely walk to their benches; others require ten minutes, and encouragement and coaxing into the bargain. The food ought always to be ready the moment hounds or other hard-working dogs enter the kennel, so that they can satisfy their hunger before they get upon their benches. It interferes sadly with a dog's comfort, and with his condition, to allow him to take partial repose on his bench before he be fed. In fact, many dogs, when very tired, will not get off their benches to feed, if they have not been fed in the first instance, unless they be forced off; and then they will only take a partial and insufficient supply, being stiff and cold, and in a hurry to return to their rest. In a well-managed kennel the utmost attention is paid to these essentials.

The same food will answer for all shooting dogs when at work, although a change is beneficial to pointers and setters, in the shape of damaged biscuits, milk, and any scraps from the kitchen. However, when pointers and setters work hard on the moors, they must have strong nutriment to

sustain them ; and horseflesh, if thoroughly boiled, and mixed in moderate quantities with the porridge, will not interfere with their noses. If horseflesh cannot be had, then greaves may be used ; these ought to be boiled by themselves for a length of time, and added to the oatmeal porridge, after it has been made in the usual manner : if the porridge be cold, then the greaves can be reheated before being mixed, as working dogs ought always to have moderately warm food on returning home after a hard day's fatigue.

Before greaves are put into a boiler to be reduced, they ought to be broken into small pieces and carefully examined before used ; as there are often sharp pieces of bones, bits of wood, and pins in them, which, if not removed, and accidentally swallowed, might prove very injurious, if not fatal.

The average price of oatmeal of the very best quality (in Scotland) is from 15 to 16 shillings the bole ; the bole contains 8 stones, a stone being 16 lbs.,—consequently a bole ought to contain 128 lbs. This meal is made from oats which have been kiln-dried previous to grinding, every particle of the husk being subsequently removed ; and, as it is precisely the same meal which is universally used in Scotland for porridge, of course requires looking after. Greaves are about 12 shillings the cwt. With greaves and meal, a ken-

nel of pointers, spaniels, setters, and retrievers may be kept at from 12 to 14 pence per head per week.

During the summer months dogs will not require such strong food as when they are at work ; the porridge may be made much thinner, and very little flesh or greaves employed ; and, if a good garden be at hand, a drumhead cabbage occasionally, cut up into small pieces, boiled in the soup, will be very beneficial : twice a week will not be too often—it will keep the dogs cool, and prevent constipation, to which some dogs are subject when kept at home. They should, however, have exercise every other day ; and if they can conveniently be let out every day, if only for a few minutes, in a grass-field, it will be attended with good effects.

During the summer months, whether dogs exhibit any sign of mange or not, they should all be once thoroughly dressed, and a little nitre, sulphur, and antimony occasionally given. The kennel should likewise be thoroughly cleansed, and whitewashed all over with a mixture of lime and water, not omitting the benches, which should be movable by hinges, so that they may be raised when necessary, and no dirt whatever be allowed to accumulate underneath them.

Great care must be taken that there is always a constant supply of fresh water, with a few pieces

of brimstone at the bottom of the vessel; and I must not omit to add, that there should always be an abundant supply of salt in the kennel, to be used at all times in the food. Dogs enjoy their food more with salt, and its use is essential to their health.

Although I have partially alluded to the treatment of hounds in a kennel, having had more particularly in view the arrangements necessary for the management and care of shooting dogs, I have only recommended the use of one boiler, which will suffice for at least twenty dogs; in fact, with twenty couple of harriers, I have known one boiler answer every purpose: in a large kennel of foxhounds, of course two boilers will be required, one for the preparation of meal, the other for the boiling of flesh; but the same system which I have before suggested must be adopted. The great advantage of the two boilers is, that you can better regulate the consistency of the food after it is made, by the addition of either liquid or solid, as circumstances may render advisable, and, by one being kept hot and the other cold, can also manage that the food be exactly the proper warmth when hounds return home, which, as I have previously intimated, is important; however, a good man in the kennel, who has twenty couple of hounds to attend to, will rarely be at fault with one boiler. These matters of detail merely

require method, with regular and assiduous attention. A man who in any way neglects his dogs ought immediately to be discharged.

I cannot close this chapter without again insisting upon the great importance of the strictest cleanliness being maintained in a kennel of pointers and setters: this is essential to the nicety of their noses, and as sport much depends upon this particular, every sportsman will do well to see that his kennel is kept as it should be. The kennel should be on high and dry ground thoroughly drained, and facing the south-east—not on low damp ground surrounded by trees, where there is no free circulation of air.

THE METHOD OF TEACHING DOGS TO BRING THEIR GAME ON LAND AND FROM THE WATER, ADOPTED IN FRANCE.

No French chasseur considers his *chien d'arrêt* of any value unless he brings his game both by land and water, and every small town in France swarms with chasseurs; hence it may be readily imagined that several persons in each locality gain their living by instructing dogs in this particular. In several French towns where I have re-

sided there were three or four persons who devoted their time and ingenuity, 'a faire dresser les chiens à bien rapporter à terre et à l'eau.' The price for this instruction, when completed, was 50 francs, or 2*l.*, besides 5 or 6 francs a month *pour la nourriture*. A dog can be taught to bring by land at any season of the year, but to bring from the water the summer is the only suitable time. It requires about two months to complete a dog's education [in both qualifications. A good hand will break half-a-dozen dogs in the same period of time, but not more, as he must devote two hours a day to each dog.

I have made use of the term *chien d'arrêt*, which literally means pointer, but is applied in France to all dogs that point their game: it would have been a misnomer, in our sense of the word, to have made use of the term pointer, as we understand by it a particular breed of dog, whereas the *chien d'arrêt* of France is almost a nondescript. It is true he points; but he embodies and combines every species of dog, and it is difficult to say to which breed he bears the closest resemblance and affinity—something of the *chien griffon*, pointer, sheep-dog, setter, and poodle being occasionally discernible. Some few French-gentleman chasseurs, who are particular as to their dogs, have English pointers and setters; but *les bourgeois*, who form the greater

portion of the French sporting community, possess this mixed race of dog.

To point game is, however, in the chasseur's estimation, a secondary consideration to the fetching and carrying perfectly—as these dogs are valuable for the winter's sport, being used for duck-shooting, and, from being taught with the spike-collar, never refuse water in the coldest weather.

The next virtue in the *chien d'arrêt* is speed; one, therefore, that can catch a wounded hare by chasing, however long he may be absent, is considered invaluable: hence every dog of this description is taught to chase, especially hares, and 'down charge' is an unknown virtue.

On my first going to France, many years since, having taken up my abode in a part of the country suitable for sporting, I was desirous of purchasing a dog or two, to commence operations. A Frenchman brought me one for trial, which he stated to be a *chien d'arrêt de la première qualité*. The dog appeared to combine the three breeds of pointer, setter, and sheep-dog, and was very long in the legs; he had been *dressé* for both *l'arrêt et le rapport*. We went out into the open country in quest of game, to put the dog's virtues to the test: he worked tolerably well, but I thought him rather slow, and made this remark to the owner. His reply was, 'Attendez un moment, Monsieur,

je vous en prie, jusqu'à nous trouvons un lièvre, et vous verrez s'il peut courir ou non.' We very soon found a hare, and the *chien d'arrêt* did certainly surprise me by his speed, and was soon out of sight, the Frenchman continually exclaiming, 'Vous voyez à présent.' He however returned in about ten minutes, when the Frenchman remarked that if the hare had only been a *trois quart*, instead of an old one, the dog would certainly have caught it and brought it back; and he appeared delighted at the opportunity which had occurred of the dog's giving proof of this valuable qualification. He was, however, rather surprised when I told him that a pointer in England would either be shot or hung who acted in this manner. This dog, however, pointed remarkably well, and was very good at snipes, which abounded. I therefore purchased him for the sum asked, sixty francs, and found him very useful—his chasing propensities not being very detrimental to my sport, as hares were very scarce; and I stopped him from chasing birds by giving him a small dose of snipe-shot when in *flagrante delicto*, and I have seldom found this remedy fail, a second dose being rarely necessary: of course care must be taken never to shoot at a dog obliquely, but when he is proceeding directly from you, so as to hit him in the hind quarters, and with small shot, at about sixty yards. I must now return from this short digression to

the method of instruction adopted *pour le rapport.*

Dog-breakers like the dogs to be about ten or eleven months old before they commence instructing them. The man in the first instance makes the dog thoroughly acquainted with him, and leads him about with the spike-collar on for several days before he gives him one lesson. There are two cords to this collar—one to lead the dog by, the other to inflict punishment, when necessary, by tightening the collar, by which operation the spikes are forced into the dog's neck. The man is provided with a piece of wood about 9 or 10 inches in length, and 6 inches in circumference, round like a rolling-pin, with two small pegs through each end, crossing one another, and projecting about an inch, so that the round part does not touch the ground when the *ensemble* is thrown down, thereby admitting of being easily taken up by the dog's teeth when he is disposed to do so. The first lesson consists in placing this piece of wood in the dog's mouth, the cord from the collar being brought round it in such a manner that he cannot easily eject it from his mouth; but on every occasion of his making the attempt, he receives a sharp jerk from the other cord; and if the wood has fallen, it is replaced, and the man leads the dog about with it in his mouth.

After having taught him to carry this imple-

ment about without attempting to drop it, he next places it on the ground, and endeavours to make him pick it up. To accomplish this the dog receives a considerable quantity of severe pricks with the collar, and the man's patience and assiduity are put to the test: but, after succeeding in this point, the progress is more easy and rapid; the implement is first thrown a short distance, the interval being gradually increased,—the dog's energy, activity, and disposition to obey being constantly stimulated with the spike-collar. At first he obeys with reluctance, but subsequently with alacrity, from fear of punishment, as a moment's hesitation is rewarded with an instantaneous jerk of the collar; and this correction is invariably administered to all dogs who hesitate in picking up the bit of wood, or who, after having secured it, do not instantly return. The advantage of this well-timed punishment is found subsequently in a dog's never mouthing or dwelling upon his game after he has picked it up, but returning instantly,—the impression never being effaced.

I had several English setters of a first-rate breed, broken by one man; and they all brought their game perfectly, without ever disturbing a feather, and returned the instant they picked it up. The setters which were 'forced' to bring in this manner at the age of 10 and 11 months I taught subsequently to stand back, &c. I had no

trouble with them whatever, the application of the spike-collar having made them perfectly docile and submissive.

When the dog under instruction will bring the *bloquet* perfectly at all distances within the length of the cord, the cord is tied loosely round his neck, and the *bloquet* is thrown to greater distances, and the dog generally obeys; but in case of any resistance, the cord is immediately resumed, and the dog is rewarded by a series of severe jerks, till he finally becomes perfect *pour le rapport par terre*. Then follows the second course of instruction by water, which is not so easy as might be supposed, as some dogs evince a great indisposition to obedience in this respect, especially smooth-haired pointers; but there is no failure as to ultimate success with the spike-collar, no matter what breed the dog be of, and a dog, when once perfectly taught in this manner, never refuses water in the coldest day.

The trainer in the first instance resorts to some piece of shallow water as the field of his preliminary instructions, and commences by dropping the *bloquet* in, near the edge; then frequently ensues a severe contest between the man and dog, the object of which is to make the latter *faire le premier pas*. Having succeeded in this, he throws the *bloquet* gradually farther and farther; but as he occasionally meets with determined resistance

when he chances to throw it prematurely too far, he is obliged to take his shoes and stockings off, and walk into the water; hence the selection of a shallow place for these early operations. By dint of perseverance the dog's education is perfected in about a month. I had several setters broken in this manner, and they never refused water in any weather, nor required in the slightest degree stimulating to fetch their game, but on the contrary were eager to do so, and I scarcely ever lost a head of game with them.

Dogs that bring their game certainly appear to me to enjoy the sport more than those who do not, and are indispensably necessary in a marshy country for snipe and duck shooting. It would be difficult to make dogs used for this purpose and in this manner, 'down charge' strictly, as they almost invariably mark down the game that is killed, and like, if not restrained, to go immediately to the spot for it. I have seen a dog on one or two occasions, returning with a snipe in his mouth, point at a live snipe, the dead snipe not having prevented him from winding the living one.

SOME SUGGESTIONS

TO

THOSE WHO HAVE MOORS AND OTHER SHOOTINGS TO LET,
WITH ADVICE TO THOSE WHO WISH TO RENT THEM.

BEING an advocate for fair-play, I am induced to offer a few suggestions, which I trust may be as beneficial to those who have shootings to let as to those who are desirous of renting them. The interests of the two parties are so intimately blended, that any suggestion protective of the rights of the former cannot fail to be advantageous and beneficial to the latter. When these interests, which ought to be mutual, are disregarded by the unfair and greedy sportsman, or violated by the dishonest gamekeeper, both parties subsequently suffer, and great vexation and disappointment is the natural result.

Many sportsmen who have taken moors on the good faith of agents, have been terribly disappointed on the 12th of August. Some instances have occurred where the best of hills have been almost entirely cleared of grouse, to the amazement and unutterable vexation of those who have come from a distance, at a great expense, with friends, dogs, and servants,—the rent having been paid in advance: and yet it was partly their own fault, in not having ascertained the exact condition of the ground through the instrumen-

tality of a competent person, before closing with the agent. The latter may have acted with perfect good faith, and himself have been deceived; for the hills may have been reduced to this state, on the last year of the tenancy of the previous occupant, by the dishonesty of the gamekeeper,—who, having remained on the ground after the party left, may have availed himself of the opportunity to kill and destroy by every means in his power, both fair and foul—by the gun and snares by day, and with nets at night.

To guard against such foul work, I would recommend the use of the form of lease which follows this chapter, with a few additional clauses. First, if the ground be let in the month of March, that the quantity of game be ascertained by competent persons, and it be agreed that the same amount be left at the end or expiration of the lease. Secondly, that no lease be granted for a shorter period than three years. Thirdly, that no game be killed except in a fair and sportsmanlike manner. In case of infraction of any of these conditions, there should be a heavy penalty, as two years' rent would be an inadequate compensation for the damage which might ensue from a reckless destruction of game during the last year's tenancy, by means inconsistent with fair sporting, and which have been sometimes employed.

There should also be a further condition, making

the party renting the moor responsible for the conduct of the keepers; and in the event of any dispute arising at any time respecting the game, that either party be empowered to demand a reference, to come off within fifteen days; and in the event of the referees disagreeing, an umpire to be appointed by them, whose decision shall be final.

If conditions of this stringent but necessary character were introduced into all leases of moors, considerable disappointment would be prevented, and the fair and liberal sportsman would neither be sacrificed by foul play or greediness on the one hand, nor by the knavery of dishonest keepers on the other; for there are persons who take moors, as well as keepers, who ought to protect them, against whom precautions are equally necessary to be adopted. I refer to those who think themselves fully justified in the last year of their tenancy (without any grateful feeling for the good sport they have enjoyed, or without the slightest consideration for the landlord, or for those who may be subsequently tenants), in cutting down the game as closely as they possibly can,—and this not so much for the sport as for the profit derivable from the sale of game. Restrictions as to the sale of game I think both unnecessary and unfair, as the tenant is fairly entitled to dispose of the produce of his ground in any manner he may

think proper; and where very heavy expenses are incurred in preserving, a portion of the game may be reasonably applied to meet them. If moors are once well stocked, well looked after, and the vermin kept under, no fair sporting will ever injure them. Some proprietors limit the number of guns; but, with the conditions already named, such restriction is altogether unnecessary.

I will now endeavour to give a few precautionary hints to those who wish to rent moors. If it be possible, never take a moor later than the months of February or March—for two reasons: the first is, because, as grouse pair in the month of March, you can easily, through the medium of a competent person and a brace of good dogs, make a fair estimate of the stock of birds on the ground; and in the next place, if that be satisfactory, and you decide on becoming tenant, you will have the best months in the year for the destruction of vermin which may be on the ground,—without which necessary operation the best prospects of sport might be seriously interfered with, especially if there be any accumulation of vermin, arising from previous neglect; but in any case, if there be a good stock of game on the ground, there will always be a certain amount of vermin to be disposed of in the months of February, March, and April. Cats, polecats, stoats, and weasels can only be kept under by regular trap-

ping during these months,—and although hawks and other destructive birds can be destroyed at any season, the spring of the year, before they breed, is the most advantageous time; you will then get rid of a generation of enemies, and protect your game when breeding, which is most important. I will not say more on this subject here, as I have treated it fully in a chapter specially devoted to it.

Never take moors in June or July, unless you know them well, and are thoroughly satisfied as to the stock of game. You cannot try them at this period of the year with dogs; and if you take them, relying on the good faith of the agent, or on their previous high reputation, you may be woefully disappointed, for reasons which I have already given at the commencement of this chapter; but if you have no alternative, then send some competent person, upon whom you can depend, to go over the ground, and question the shepherds and gillies, and obtain all possible information; especially ascertain who was the previous tenant, as this may be important, and be a clue to your obtaining the information you desire. Although an experienced keeper, in this way, and by going over the ground carefully, might form some estimate as to the quantity of grouse, by certain infallible indications of their presence, still it might be far from an accurate one; but as

it is the only course which can be pursued at this season of the year, it must on no account be neglected. Be sure to have most stringent conditions as to the burning of the heather, as without these your best prospects of sport may be completely destroyed. All shepherds will burn more than they ought to burn, especially if they are the servants of a tenant-farmer, and not of the landlord, and they will always have a ready-made excuse for the excess. Your safety, therefore, as regards this practice, is *solely* in the responsibility of the landlord; the quantity to be burnt each year must be distinctly stated, and agreed on, in your lease, and a heavy penalty attached to any excess,—as your sport may be destroyed for three or four years by any reckless or extensive burning, as I have known to have been the case. The burning generally takes place in the month of March. If the weather be dry and the wind high, the conflagration proceeds rapidly; and as the shepherds generally select the night for the commencement of their operations, your keepers and watchers must be on the alert. No heather can be legally burnt after the 10th of April; the penalty for each offence subsequent to that period is five pounds. Heather ought only to be burnt in small patches, and not in whole districts, as is frequently done; in which case the grouse are not only driven off the ground, but those bred con-

tiguously to the denuded spots more easily become victims of birds of prey, by their opportunities of sheltering themselves when pursued being decreased. On moors where there are many bare places, coveys bred near them will always be found to be reduced to a very small number by the 12th of August.

A very assiduous and attentive keeper, who had had the charge of extensive moors for many consecutive years, and who was constantly on his ground, told me he had invariably observed this result,—notwithstanding his having been as successful as any man I ever met with, during a long experience, in the destruction of vermin of all sorts. This circumstance is partly explained by the fact, that hawks, coming from any contiguous ground, will return to spots day after day, where they have once been successful in taking game; so that a keeper, however much he may be on the alert, may lose several young birds before he may get a favourable opportunity of destroying the enemy. The keeper to whom I have above alluded I have known remain on his ground all night, in order that he might be in concealment at daybreak, when a falcon or hen harrier was in question. His perseverance was sometimes put to the test, but he seldom failed.

FORM OF LEASE FOR SHOOTINGS.

IT is contracted and agreed between A. B., Esq., of Grouse Hall, Perthshire, on the one part, and C. D., Esq., of Pall Mall, London, on the other part, in manner following (that is to say): the said A. B. hereby lets to the said C. D. and his heirs, but excluding assignees and subtenants, without the special consent of the proprietor in writing (the proprietor not being bound to assign any reason for withholding such consent), and that for the period of five years, from and after the first day of May, one thousand eight hundred and sixty-five, the exclusive right by himself, or others having his authority, of killing game over the whole of the farms and moors of , in the parish of , belonging to the said A. B.; for which causes, on the other part, the said C. D. obliges himself and his heirs, executors, and successors, conjunctly and severally, without the benefit of discussion, to pay to the said A. B. or his foresaids, at the Mansion House, Grouse Hall, or at such place as the proprietor may from time to time appoint, the sum of one hundred and fifty pounds sterling of yearly rent; the first year's rent to be payable on the signing of these presents, the second year's rent on the first day of May, one thousand eight hundred and sixty-six, the third year's rent on the first day of May, one thousand eight hundred and sixty-

seven, the fourth year's rent on the first day of May, one thousand eight hundred and sixty-eight, and the fifth year's rent on the first day of May, one thousand eight hundred and sixty-nine, with one-fifth part more of each payment in case of failure, and the legal interest of each year's rent, from and after the time when the same becomes due, during the non-payment thereof; and the said C. D. hereby stipulates and engages that he shall care for and protect the game in a fair and proper manner, encourage the different breeds, and in no event shall he be entitled to extirpate or entirely destroy the same; and that he shall not kill more game during the last year of his possession than, having reference to its judicious management, he has killed or ought to have killed in previous years; and in the event of any difference of opinion arising between landlord and tenant in respect of the mode of the management of the game, the same shall be referred to two neutral persons of skill, to be mutually chosen, or their oversman, whose award shall be final; and failing such appointment within ten days after a request to do so is made in writing by one party to the other, it shall be in the power of either party to apply to the judge ordinary to appoint a skilful person to inspect and report on the premises. And both parties bind and oblige themselves to implement the premises to each

other, under the penalty of three hundred pounds sterling, to be paid by the party failing to the party observing or willing to observe the same over and above performances. In witness whereof these presents, written on this and the preceding page, by W. H. of are subscribed to by us as follows:—*Videlicet*, by me, D. C., of Pall Mall, London, at , the first day of June, 1865, before these witnesses, R. F. D., merchant, &c. &c., and W. T., gentleman, , and by me, A. B., at street, London, this first day of June, 1865, before these witnesses, R. F. D., &c. &c. &c., and T. W., &c. &c. &c.

R. F. D., witness.

A. B.

W. T., witness.

R. F. D., witness.

C. D.

W. T., witness.

I suggest the adoption of the preceding form of lease, as I believe it to be as good a one as can be drawn up—the conditions being equally fair to both parties; and in the event of any dispute arising, a reference may be resorted to, to come off within fifteen days, each party having the power to select a referee.

I should never recommend any sportsman to take a moor for only one year; but in the event of circumstances inducing him to do so, I strongly advise him to have an agreement in writing of the

most explicit and intelligible character, so that there can be no mistake as to its terms or meaning; and on no account whatever to be induced to pay the whole amount of rent down at the commencement of the season, as such an indiscretion would place him entirely at the mercy of an unscrupulous and rapacious landlord. I would preferably suggest that half the rent be paid down on the 12th of August, and the other half to be deposited on the same day, in the hands of some responsible person, selected by mutual consent as trustee, to be held by him till the 11th of December, and then to be paid over to the landlord, in the event of no dispute having arisen; but on the other hand, in the case of any disagreement having occurred, the half of the rent to be withheld, till such disagreement be settled. In making the above suggestions, I am not drawing upon my imagination and merely anticipating difficulties which might possibly arise, but am influenced by disagreeable realities of the past, which unfortunately came within my own personal experience.

The facts are as follows, which I relate for the future guidance of the inexperienced. Two friends had taken several moors in the same part of Scotland, contiguous to each other, from three different proprietors. On the largest of the three there was a comfortably furnished lodge, of which the two sportsmen took possession on the 12th of

August, and unwisely, as the sequel will prove, paid the whole amount of rent down; although by their agreement they were only bound to pay half down on the commencement of the season. It was estimated that the moor could safely afford a certain number of grouse, which number it was agreed should be killed, but no more—there was no restriction as to number of guns or as to friends. On the 13th of August one of the sportsmen was taken seriously ill, so much so that he was confined to the lodge till the day of his departure for England—consequently he had had only one day's shooting. He was accompanied to England by the other sportsman about the beginning of September; up to which time not half the amount of grouse agreed to be killed had been bagged. A keeper was left to take care of the moor and dogs. The two tenants, shortly after their return to London, decided on not revisiting the moor, and very kindly made an offer of the shooting and the use of the lodge to myself and a friend. We gladly accepted so agreeable and friendly an offer, with the full intention of availing ourselves of all the privileges which it extended to us. The keeper was written to, in order to be prepared for our arrival, and we took our departure about the end of September, travelling two nights and a day and a half, thus reaching our destination on the middle of the third day; the distance

was about 750 miles. On arriving we found that we 'had counted without our host,' as the landlord, the recipient of the entire rent for the lodge and shootings for the whole season, had ordered the lodge to be closed against us, except we signed an agreement not to shoot over his moors; this suicidal act we of course declined to commit, and as the lodge was not accessible to us, took refuge in an inn, at the inconvenient distance of seven miles from the moors. On consulting with the Procurator Fiscal we found that the laird had no right either to close the lodge, or to prevent our shooting over his moors; we therefore determined to avail ourselves of the permission we had received, on the third day after our arrival, having decided to shoot over the two other moors, which our friends had rented, on the two first days, which happened to be nearer the inn. The proprietors of these moors showed us the utmost courtesy, admitting our rights, and affording us every facility to obtain sport; and as the weather was very fine, we had two days' excellent shooting.

On arriving at the beat, which we intended to take on the third day, on the moor of the refractory and hostile laird, we encountered the keeper, who objected to our proceeding to business, retiring, however, to the rear of us, on receiving a caution from us to that effect.

After beating some of the best ground on which our friend's keeper informed us there ought to have been abundance of grouse, we scarcely found any, only a few broken lots; it was, therefore, not difficult to perceive that the ground had already been beaten and the birds driven off; and this, the keeper, on being questioned by us, did not deny had been done, and by his master's orders.

And when we subsequently reached ground which had not been beaten, the keeper and another fellow of similar calibre went a long way ahead of us, beating the ground before us with their sheep-dogs, thus preventing us from having any considerable amount of shooting. On each occasion of our visiting this ground we found that the same mean and contemptible practice had been resorted to, so that we had but little sport.

Sometimes the best beats were covered with sheep, which on our arriving were set in motion by dogs, so that it was difficult to obtain many shots. One of the countrymen of this cormorant laird, with a very just and correct appreciation of his character, observed—‘I ken he has got the siller, and wishes to have the birds tae.’ I do not hold this laird up to the notice and to the well-merited censure of all honest men, as a type of Scotch lairds, as I know he is merely a discreditable exception. I have experienced too much courtesy and liberality from very many lairds with

whom I have had communication and various transactions at different times, during the many years I resided in Scotland, not to have arrived at a very different conclusion.

I merely exhibit this unenviable specimen of avarice and meanness, as one of those exceptions which do exist, and which might be again encountered, in order that the inexperienced in these matters may be warned and be on their guard, and on no account be induced to pay their money beforehand, or take any moor, except on clear, precise, and intelligible conditions, drawn up in a legal form and properly subscribed to; and having also in the first instance ascertained that the moor they are about to take corresponds with the description given of it. This is the first step.

FISHING IN SEA-WATER LOCHS.

SEA-WATER LOCHS in Scotland, particularly those in the western part of it, abound in a great variety of excellent fish, thus offering a fine opportunity to those who are fond of indulging in the sport, should they visit or locate themselves in that wild and picturesque part of the United Kingdom. The sea-water lochs are open to everyone for all sorts of fishing, either by rods, lines,

or nets, with the exception of trawling or splashing for salmon and salmon-trout within a mile of the shore,—the exclusive right to these fish being secured by Act of Parliament to the landed proprietors contiguous to whose shore they may be found within the above-named distance; but all other fish may be taken in any way.

In some of the best lochs, turbot, soles, haddock, cod, whiting, mackerel, herring, flounders, skate, gurnet, leith, seith, and conger eels abound. There are also certain parts of some of these lochs which abound in oysters and lobsters; and fishermen have sometimes brought me scallops and razor-fish; the latter are plentiful, but the former are not so. To enjoy this sport in perfection, a good boat, nets, lines of all sorts are required, and the aid of a man who thoroughly understands boating and fishing; the latter will be especially necessary to ensure safety as well as success. Those who live in the vicinity of these lochs can alone enjoy this profitable and recreative amusement to any extent, in consideration of the numerous appliances which are requisite. I will first mention the various methods of fishing, with the names of the implements used, and then give such information as I possess upon the different modes of operation.

1st. Deep-sea trawl, for taking all sorts of flat fish, such as turbot, soles, flounders, &c. 2nd.

Bag-net, used exclusively for salmon. 3rd. Drag-net, or trawl, used for taking salmon, salmon-trout, and any other kind of fish. 4th. Splash-net, for all sorts of fish. 5th. Long line, with 500 large hooks, for cod, haddock, skate, conger eel, &c. 6th. Long line, with 500 small hooks, for haddock, whiting, codling, flounders, and gurnet. 7th. Hand line, for whiting, codling, flounders, gurnet, &c. 8th. Long leaded line, for mackerel, used either in sailing or rowing. 9th. Rod fishing with white fly, from the stern of the boat, for leith, seith, and herring.

As the water is frequently very rough in sea-water lochs, and squalls come on very suddenly, a good well-built boat is essentially requisite, in order that you may carry on your operations efficiently and securely: in fine weather, during the summer months, a boat of about 12 feet keel will suffice, but in the autumn and winter months, when the weather becomes uncertain, a much larger one will be necessary,—one from 16 to 18 feet keel, with good breadth of beam, i.e. $\frac{8}{18}$ of her keel; this boat will carry mainsail, foresail, and jib. If she be built of the best materials, copper-fastened, and feathered and finished in the best possible style, she will cost from 15*l.* to 20*l.*, exclusive of four oars, the sails, and other requisites, which will amount to about 10*l.* more. The smaller boat would cost about 7*l.*

she would require a lug sail, which she would carry well on a fine day with a moderate breeze; but the greatest caution is requisite with a boat of this size at ALL times, but more especially on a gusty day, as she is easily upset if not properly managed; and in all lochs you are constantly subject, even in the finest weather, to squalls, but more especially when the wind is at all in the east, or if there be any dark clouds flying about.

On no account put up a sail in a small boat, unless you thoroughly understand the management of sails; and, when hoisted, let the rope which holds the sail, i.e., the sheet, if fastened, be secured only by a slip knot, so that you can unloose it in a moment; but it is safer to have it in hand, through a ring fixed to the gunwale of the boat for the purpose. The rope which secures the sail to the beam, i.e., the halliard, ought not to be tied in a knot, but merely doubled back behind the iron pin which holds it, so that the person sitting near the mast can liberate it the instant you order him to do so, and thus let down the sail. Whenever the weather happens to be boisterous and squally, it is always prudent to have one person sitting near the mast with the halliard in hand. Be sure, also, to have sufficient ballast; this is of vital importance; without it there is no security, even if there be only an ordinary breeze, the day fine, and the sun shining on you. You

are always exposed in sea-water lochs to occasional strong blasts of wind, which you cannot always perceive arriving on the surface of the water, as they sometimes come over the tops of the mountains and descend upon you without notice; hence the danger in a small boat with sails, without skilful and prudent management.

If you apprehend danger with your entire sail, take in as many reefs as you can, lowering your sail proportionately at the same time; and if the breeze be too powerful for this reduced quantity of canvas, then luff up, down with the sail, and use your oars. Never allow your boat to be dead on the water or lose her way, by luffing her too much, i. e., turning her head too much to the wind when a squall strikes the sail, as this is a most dangerous position to be in,—but keep the sail full, easing it a little; and when you tack, never tack down wind, or you will infallibly be capsized, if there be anything of a breeze: this is what sailors call ‘jibbing,’ and can only be done in safety when the breeze is very slight, and then must be done cautiously, letting out the sail at the same time.

If you cannot tack cleverly, it is safer to relax your sail and use your oars, otherwise the boat may become stationary and exposed to considerable danger, in the event of a strong blast of wind arriving precisely at that moment.

ON SEA LOCHS, ETC.

SINCE writing the preceding chapter, so many accidents have occurred within my own immediate knowledge, involving on each occasion the loss of lives, from the incautious use of the lug-sail in small boats, that I cannot refrain from adverting to some of the circumstances connected with it, in order that those who visit the Highlands, and who may be induced to venture on the sea-water lochs in a *small* open boat, may be on their guard whenever the use of the sail is proposed, and not be deluded into a state of false security because the day is fine, and the men employed are reputed skilful,—as the accidents to which I allude have not happened to the inexperienced, but to men thoroughly conversant with the use of boats and the nature of the lochs, and well aware of the risks and dangers they might encounter, but who were either too bold, or negligent of the most ordinary precautions.

The sea-water lochs are generally surrounded by high land, mountainous and uneven, so that the wind, by being checked in some places, comes with redoubled and concentrated force in others, thereby occasioning squalls whenever there is more than an ordinary breeze; and if a squall strikes a small boat, and there be either insufficient ballast or too much sail, she will be in great

danger of being upset ; but in *any case*, if either rashly or unskilfully managed—it is the affair of an instant.

Occasionally, during the summer months, there are days on which there is a fine steady breeze, exempt from squalls, on which a small boat, with its entire sail, is perfectly safe, if properly managed ; but these occasions are rare. I have generally observed, that there is either too much or too little wind, for small boats ; hence the necessity of being on your guard. What I specially recommend is, attention to ballast and to the size of the sail. Never omit a proper amount of ballast ; and you must be guided in this respect by the trim of your boat,—and this is relatively to her depth in the water fore and aft ; and, if there be more than an ordinary breeze, take in as many reefs as you can. When a small boat is made thus snug, if she be a good, well-built one, she cannot easily be upset, provided always every vigilance and precaution be exercised. But, in taking in reefs, you must on no account omit at the same time to lower the sail ; for, without doing this, your boat would derive little or no relief, the undue preponderance at the distance counteracting the good effect of the reduced quantity of canvas.

A boat, with nine workmen in it, was recently upset in crossing a loch, and five of the men

drowned. This accident happened in consequence of the sail being too large and too heavy,—a squall having suddenly caught it, and capsized the boat. If this sail had been reefed in, it would not have happened, provided there had been sufficient ballast in the boat,—and *this* I very much doubt; and in all probability the sheet was fastened, as the boat could not have been upset if any one of the nine men had had the sheet in hand and liberated the sail at the proper moment. But the man holding the helm ought to have had the sheet in hand, as he is the most competent person to know exactly the moment when this relief can be judiciously and advantageously afforded; and great skill is required in doing it, in order that it be not overdone, so as to cause the boat to lose its way.

One would have thought that men bred on the banks of a sea-water loch would have acted with more circumspection — more especially as this identical sail had previously occasioned loss of life under precisely similar circumstances. But the most experienced and most skilful are occasionally the most bold and venturesome; and only a fortnight has elapsed from the time I am now writing since an accident occurred in this immediate vicinity, involving the loss of two lives, which corroborates this opinion.

Four men had gone on the loch to try a new

fishing-boat ; she was of moderate size, with a lug-sail. The parties were, as they termed it, anxious to see what she could do—how she could sail. There was more than a moderate breeze, with squalls sufficient to demand caution. The man at the helm was a fisherman, who had passed his life upon sea-water lochs, and was as skilful in the management of an open boat with a lug-sail as any man on the coast, but had the reputation of being very daring ; and here was the evil. He relied too much upon his skill and his previously frequent hairbreadth escapes, and fastened the sheet ; the consequence of which was, that, on a heavy squall arriving, the boat was capsized in an instant and went down—which would not have been the case had the sheet been in hand, as it ought to have been, with such a boat, under such circumstances. Two men were drowned, the other two picked up by a boat which was at hand and came immediately to their aid.

On several occasions this year, when out with a small boat with a lug-sail, mackerel fishing, I should have been capsized by squalls, had I not had the sheet in hand, and been able at the moment to have eased the sail. If you are any distance from the high land, you can always perceive the squalls arriving on the surface of the water from a considerable distance, and can therefore be prepared if you exercise proper vigilance, partially

to counteract their effect, by easing the sail at the same time that you turn your helm or luff slightly to the wind.

Two other accidents happened from the same cause as before mentioned ; one about six weeks since, and the other two years ago. The latter occurred to three fishermen, not far from the shore, and in the sight of several persons—the three men being old experienced hands. The boat was similar in make, size, and construction to any ordinary fishing boat—open, and with a lug-sail. They were sailing fast before the wind, with a strong breeze, when they encountered a sudden squall from the opposite direction, which of course jibbed the boat ; and, as the sheet was fastened, the boat, not receiving sufficient relief from the helm, went over immediately, and the three men were drowned. In this case, if the sheet had been in hand, the boat would not have been capsized.

The reason for this extreme precaution of having the sheet always in hand, is, I think, evident, from the fact that, in these sea-water lochs, squalls frequently come on in an instant, either at right angles to, or immediately opposite the direction of, the wind filling your sail, and which is impelling you. The immediate and inevitable consequence of this counter action is the jibbing of the boat, and its capsize—if the sail be fast, and the boat be going before the wind.

The nature of the surrounding hills and mountains easily explains these back and counter-currents of wind, as well as their concentrated violence.

The other accident to which I have alluded remains unexplained, as the four persons who were in the boat were all drowned. This boat was an open one, as large as a good-sized fishing-boat, from 22 to 25 feet keel, with a mainsail, jib, and foresail. The party consisted of two gentlemen and two sailors. The former had been on an excursion of pleasure, and were returning at night across a wide sea-water loch. The weather was rather squally, but not too much so for a boat of the above size: her being capsized is therefore attributed to mismanagement; and this opinion was strongly supported by the fact that, on recovering the boat, every halliard, sheet, and tack, was found tight and fast.

A boat recently strongly recommended to me for the purposes of all sorts of loch fishing, is one of 15 or 16 feet keel, 6 feet beam, sharp at the bow or forepart, round stemmed, and flat in the middle. A boat of this construction could not easily be upset, and would be very convenient for long-line, hand-line, mackerel, and salmon and salmon-trout fishing. There is, I believe, only one sort of boat more safe, and that is a coble; and this is made purposely for salmon and salmon-trout fishing. This boat carries a lug-

sail, and, from her peculiar construction, will stand a heavy sea. She is very broad and flat at bottom, and therefore equally safe and convenient for taking in nets or long lines, and maintains her equilibrium with one or two persons moving about in her; and this solidity is quite requisite, as, in taking up the large long line, two persons must be at the same side of the boat at the same time, both rather leaning over—one drawing in the line, the other gaffing the fish; and as there is sometimes a little excitement at these moments, as well as considerable movement, a narrow-built, light boat would not only be unsuitable but dangerous. In hauling in nets it is equally essential that the boat used for the purpose be very stable and solid,—in fact, for all sorts of fishing.

HAND-LINE FISHING.

DURING the summer months on a cloudy day, or early in the morning, or towards the evening on any fine day, very good sport is to be had with the hand-line; and two or three persons may partake of the same amusement at the same time, out of the same boat, each with his own hand-line. The most favourable moment is when the tide is rising, especially if it be towards sunset, or immediately after sunrise.

The hand-line is on a reel, made of any common wood, about 8 inches square, so that you may let it out or wind it up at pleasure. The length will depend upon the depth of those parts of the loch in which you are in the habit of fishing; about 60 feet will generally suffice. The best places for this sport are not in deep water, but upon sand-banks, which are to be found in all lochs; these being the spots to which almost all sorts of fish generally resort, especially such as you wish to take with the hand-line. The end of the line is fastened to the centre of a strong piece of whalebone, about 18 inches in length, the thickness of your little finger, at each extremity of which you must have a strong piece of gut, from a foot to 18 inches in length, with a moderate sized hook at the end. A piece of lead must be attached exactly to the centre of the whalebone, about 3 inches under the fastening, so that when you let your line down the whalebone may descend horizontally: the lead will inform you when your hooks have reached the bottom, and will also acquaint you with the nature of the bottom on which you are fishing. You must raise your hooks gradually and frequently from the bottom to a short distance, allowing them as gradually to descend, holding the line steady, so that you may be aware the moment a fish commences to bite; the time to hook him a little experience will soon teach you.

The best of all baits is the mussel. When that cannot be had, periwinkles boiled, as they are then drawn easily out of their shells by the end of the hook; and when put properly on, cannot be removed by the fish without his being hooked.

Flounders, whiting, haddock, codlings, and even large cod are fond of the mussel. Thus your sport with the hand-line may sometimes not only be very amusing from its variety, but satisfactory from its usefulness. You should always be provided with a gaff, in case you should hook a large fish—which will not unfrequently be the case—as you would incur the risk of losing him, and of breaking your line by attempting to lift him out of the water, without the aid of the gaff. Frequently large skate will take the mussel, which you could not possibly get into your boat without using a gaff; and it is hazardous to attempt to handle them. These fish frequently break the line from their great weight, adhering with all their strength in the first instance to the bottom; so much so, that you occasionally fancy that your hooks are fast upon a rock.

In pursuing this sport you must be provided with a good anchor, which you will throw out when you reach a favourite spot; and if you have a long rope, you may change your position without drawing your anchor up, by allowing your boat to drift with the tide.

When the fish do not bite freely, it is a good plan to bait the ground by throwing out mashed potatoes, either boiled or raw: this will attract a multitude of fish together; but if the tide be running strong at the time it cannot be managed, as the ground-bait will be carried away. It will be well to be provided with a pair of waterproof overalls, and a light macintosh, as, in drawing up the line on each occasion, a quantity of water will unavoidably come over you, and soon completely saturate your dress, without this protection. The small common shellfish which may be picked up along the shore, make an excellent ground-bait when mashed up with some potatoes. Some fishermen boil their muscles before using them, as they adhere better to the hook, and are not so easily taken off; this is not a bad plan where whittings are abundant, as the smaller ones are rather more difficult to hook than other kinds of fish. Gurnet and codlings are very voracious, bite greedily, and are easily hooked; flounders also bite freely. On a fine and favourable day two or three persons may each take several dozen of fish, especially if the whiting be in season.

ROD FISHING WITH WHITE FLY, FOR LEITH, SEITH, AND HERRING.

THIS sport, in my opinion, is by far the best and most amusing of all the fishing which the sea lochs afford, although it requires no skill. The best time for pursuing it is just before sunset on a fine summer's evening, till ten or eleven o'clock—in fact, as long as the fish will rise and you can see to catch them; if there be a little wind so much the better. As this sport cannot be pursued single-handed, you must have a man to row your boat. He must row you over the favourite spots, and these you will soon discover from experience. You must have five or more rods—in fact, as many as you think you can manage; the greater the number of rods the greater the number of fish which will follow your boat—long and light; the commonest will answer every purpose; the line *not quite* the length of the rod, so that on hooking your fish you can lift him at once into the boat without touching the sides. The line should be of strong horsehair, with a strong piece of gut at the end; the fly, a white one—merely long wings made from the tail and under feathers in the white sea-gull's wing, fastened on with red silk, and with gimp, or with anything bright and showy. Five rods on a favourable evening will keep one person

constantly employed. The quicker you can get your fish into the boat and unhook them, and throw your line into the water again, the better, as you will constantly have a fish on each line at the same time ; therefore despatch is advantageous. You must sit near the stern of the boat, on a plank across the bows, under which you will insert the ends of the rods, some bushes having been previously fastened to the under part of the plank so as to keep the rods firmly in their place, —by which means the fish will hook themselves as your man continues gently rowing onwards. You will always be more successful when going against the tide than with it ; and if the tide be rising at sunset, that will be all in favour of good sport. At low-water your chance is not so good. The leith and seith which you will take in this manner will be from a quarter of a pound to a pound, and sometimes heavier.

The leith are an excellent fish, something of the flavour of whiting ; in fact, they are the rock whiting. The seith are not quite so good. Both are a very handsome-looking fish when small. Both seithe and leith out in the open sea are sometimes taken of a very large size. The seith, after leaving the lochs and going into the open sea, becomes a very large weighty fish, and is then called steinloch ; it is in great request amongst the poorer inhabitants of the sea-coast, and is

taken in great abundance in the autumn, and salted for winter consumption. It is then a very dark-looking, coarse fish, anything but a delicacy, and, when salted, very inferior to cod : it is caught out in the open sea, near any small islands where there is a strong current. Very strong tackle is required to secure it : a large hook covered with cotton or wool is the bait generally used ; the line is very strong and lengthy, wound round a common reel. This does not, however, always answer the purpose efficiently, as the fishermen frequently have their hands much damaged by the rapidity and violence with which the cord passes when a large fish is first hooked, as he generally goes off at a tremendous pace,—so that a large strong multiplying reel would be the proper article for the purpose.

But to return to the rod fishing : in addition to leith and seith, herring, when they come into the loch, may be taken in the same manner in great abundance ; I have taken 100 in one evening. Sometimes small cod and mackerel will also rise at the white fly ; but there is a better and more successful way of taking mackerel, which I will explain in another chapter. I have also occasionally caught small salmon-trout with the white fly. When the herring come in large shoals near the coast in the west part of Scotland in the month of June, they not only give wonderful sport to

the amateur fisherman, but afford a large and useful supply of food to the poor inhabitants of the vicinity. On these occasions every boat is brought into service; and it is rather an interesting sight on a fine summer's evening, just at sunset, to see from twelve to fifteen boats afloat, each containing four or five persons with eight or ten rods out at the stern, drawn up as it were in line, like so many horses ready to start for a race, on the tranquil surface of some bay contiguous to the ocean, awaiting the disappearance of the sun below the horizon and the arrival of the herrings on the surface.

This wished-for event takes place *immediately* after the sun has gone down, and if the tide has begun to flow, is instantly indicated by thousands of bubbles upon the glassy surface of the deep; every boat is in motion, and all the oars in a state of activity to reach the wished-for spot. One person rows the boat, and two or three manage the rods; and these will be kept in a continual state of activity for one or two hours, when the herrings in an instant disappear to the bottom without any apparent reason. The boat must be rowed gently over the spot where the herrings are in motion. No number of boats appears to disturb the herrings, or prevent them taking the fly when they are in the right humour. If the night be exactly favourable, and the herrings in the best mood for taking

the fly, three rods will be as much as one person can manage, as he will frequently have a fish on each line at the same time; consequently he who can exercise more skill in expeditiously bringing his fish in, unhooking him, and throwing out his line again, will catch most fish. The line ought not to be longer than the rod, so that you can readily swing the fish into the boat without his striking the sides of it; in which case he would fall off, as the least thing disengages a herring, his mouth being very tender.

A light macintosh is a very desirable garment for these occasions, as, in swinging the herring in, nine out of ten come against your body; in fact, you ought, for the purpose of expedition, give exactly that impulse to your line that the fish may just reach you and drop between your legs; in which case the macintosh acts as a protection from the scales of the herrings, with which you would be otherwise covered. Sometimes the herrings, although numerous, will not appear upon the surface. You must then immerse your rod perpendicularly in the water, as far as you can; this will often succeed. When the herrings are numerous, they will take the white hook without any feather upon it as readily as they will take a covered one.

MACKEREL FISHING WITH LEADED LINE.

WHEN mackerel are abundant, and the day suitable, they afford excellent sport with the leaded line. The day must not be too bright; in fact, the less sun the better: and there must be a slight breeze, just sufficient to fill the sail of a small boat, so that you may pass over the places where you see the mackerel playing at a moderate pace, having your lines out at the stern of the boat. The line may be about fifty feet in length, with a yard of strong gut at the end; the hook of moderate size; the lead must be about three yards from the end of the line, five inches in length, of sufficient weight just to keep the line under the water when sailing with a steady breeze.

The best bait is a small piece of the under part of the mackerel, about two inches in length, and a quarter of an inch in breadth, tapering towards one end, the hook merely run through the wider end. The end of the line may be fastened to the side of the boat, for better security; and this ought to be done in the first instance, to prevent the line from slipping through your fingers as you are letting it out; you will, of course, hold the line in your hand, occasionally drawing it gently towards you and then gradually letting it out

again. You will readily perceive when you have a bite, as the mackerel are strong for their size, and bite sharply. The resistance offered by the advancing of the boat, at the same time that it hooks them, adds very sensibly to their weight.

When your fish is hooked, draw him in gradually, not allowing the line to become slack, and then lift him gently and perpendicularly into the boat, as he is less liable to become unhooked in this position. On a good day each line may take several dozen. If there be no wind, so that the sail cannot be used, you can then have recourse to the oars; but you must not expect as good sport as with the sail; though you may take a few.

If you have no mackerel for a bait to start with, you can try a white fly, or a bit of red cloth; with both of these I have frequently taken them. If you do not see any mackerel playing anywhere on the surface of the water, observe where the gulls are hovering, and try under them, as both gulls and mackerel will be in pursuit of the young herring, and consequently not far distant one from the other.

Mackerel generally come into the sea-water lochs in the West of Scotland in the month of July, and are very abundant till the middle of the month of September, when it is supposed they take their departure; but their movements are

regulated by the young herrings, which they invariably follow in large shoals. When fishing for mackerel in this manner, you will frequently take gurnet and codling, especially the former, as they, like the mackerel, are also constantly in pursuit of the young herring.

I must not omit to mention that the best bait for this fishing, next to a piece of mackerel, is a piece of the belly of the gurnet; and in one respect it is the better bait, inasmuch as one piece will sometimes last for several days. It is so tough that it never tears, especially if it be kept for a day, and dried before it is used; whereas the bait made from part of the mackerel is soon destroyed, and requires replacing by a fresh one.

The way to prepare the gurnet for a bait is to clear away all the flesh from the white skin of the belly with a sharp knife, and then lay it on a board to dry; when it may be cut, either with a sharp knife or pair of scissors, into pieces in the shape of a small fish, about two inches in length, and a quarter in breadth. After being dried it becomes so tough, that you cannot get even the point of the hook through it without making an incision with the point of a sharp knife. I have tried white leather; which will not answer the purpose, as it soon becomes dark-coloured in the

salt-water; whereas the gurnet skin becomes more white by use.

When engaged in this sport, be sure to have plenty of ballast in your boat—rather too much than too little, as you are always liable to a sudden breeze in a sea-water loch, no matter how fine the day may be; and without this precaution you may be upset in a moment, with the sun shining upon you at the time.

SEITH AND LEITH FISHING,

WITH ROD AND LINE, WITH WHITE FLY, BY NIGHT,
IN THE SOUND OF JURA.

AT the northern end of the Sound of Jura, which is about eight or nine miles in breadth and twelve in length, there is a small rocky island, lying north and south, nearly midway between Jura and the south-eastern part of North Knapdale, and about five miles from Crinan, in the immediate vicinity of which there is excellent rod fishing, for seith and leith, during the months of May, June, and July, whenever the weather may be favourable. May and June are, however, the best months, as the seith and leith occasionally, during the month of July, desert their usual places of resort in quest

of the young herring. This sport commences about ten minutes after sunset; and if the moon be at the full, or thereabouts, and the night fine and calm, may be carried on till eleven o'clock, and sometimes as late as even twelve; and be recommenced at about two o'clock in the morning, and continued till half an hour before sunrise, when the innumerable multitudes of fishes, which have enlivened the surface of the water, simultaneously disappear, and the sport ends.

The island in question is almost a barren rock, rising in the centre some twenty feet above the surface of the water. The sides, in many parts, slope down to the water's edge; thus affording an easy access to small boats, especially as the sea is perfectly calm at the sides, the current being diverted by the opposing ends of the island, as the tide flows north and south, flowing to the north, and ebbing southwards. The upper part of the rock is rough, rugged, and uneven, with a few straggling tufts of grass here and there, intersected by hollow spaces holding water. This spot is the resort of innumerable sea-swallows and sea-gulls. The former, which are not visible during the winter months, make their appearance in this vicinity on the 15th of May; and as they commence breeding in June, and select islands of this description for the purpose, their eggs may be found in great abundance, two or three toge-

ther, in any small cavity on the surface of the rock, without scarcely any semblance of a nest. The eggs are about the size of a golden plover's egg, and somewhat similar in appearance, although not so uniform and regular in size and colour. When boiled hard, they are almost, if not quite, as good to eat. I have sometimes found on two small islands as many as 200 in one day, and as many more after an interval of four or five days.

The island of which I have commenced the description as the scene of piscatorial operations is about 150 yards in length, and from 25 to 30 in breadth. From its tortuous and irregular construction, it forms several small nooks or bays at the sides, excellent for boat fishing with rods, in addition to the tranquil spots between the currents at each end of the island. As in the immediate current, at the moment of either the tide's flux or reflux, two men can scarcely row against the stream, and at the very highest tide I question whether even four men could do so, it is essentially necessary, even in the very finest weather, to have two skilful and powerful rowers to keep your boat whilst you are fishing within the intermediate spaces, in the centre of which there is scarcely any current; but which commences, and gradually increases, as you approach the sides. And as these sports, from the narrow-

ness of the island, are necessarily small, both skill and strength are requisite to keep your boat within the prescribed limits; but in proportion as the tide rises or falls, the current becomes less violent, and about half-tide is the most favourable time for sport.

At each end of the island, opposite those parts which stem the tide and occasion its precipitate divergence on each side, are the most favourite spots. These, from the narrowness of the island, are small; but, when fish are abundant, they afford sufficient space for the successful operation of three or four boats, as the fish, when well disposed to take the fly, do not appear to be in the slightest degree alarmed at any number of boats, but continue playing on the surface close to the boats on all sides, in the midst of all the hostile movements against them.

At half a mile distance from the island there is another equally favourite spot, of a couple of acres in extent, more or less, where there is a perfect calm between two powerful currents, the cause, which is not immediately perceptible, being a reef of rocks, concealed beneath the surface, and only discernible at low tide. It is rather a singular sight to witness a dead calm out in the open sea, with a violent tide on either side carrying everything before it; and when one approaches this tranquil, mirror-like, glassy surface,

for the first time, ascending through the opposing current, it is not without a secret and uncontrollable emotion of dread, so treacherous and unnatural is its appearance. The violence and the strength of the tide in the Sound of Jura is readily explained by the narrowness of the channel, and the fact of its waters being influenced by the weight and pressure of the vast Atlantic Ocean. In like manner, in the German and the English Ocean the tide is found to be strongest in those places which are narrowest; a large body of water, in each case, being driven through a small passage. Another effect of this relative disposition of circumstances, is the tides rising to a very great height.

Having given this slight sketch of the scene of piscatorial operations, I will endeavour to explain the manner in which they are successfully carried into effect. The mode of proceeding is similar to that adopted near the coast for taking small seith, leith, and herring. The principle is precisely the same; but as the fish at a distance from the shore are much larger and more powerful, stronger tackle is required; the rods and lines must be stouter, the hooks larger and stronger, and the white feather, of which the fly is formed, longer. The fish taken in the vicinity of this island average from one to three pounds. Sometimes fish as large as four or five pounds are caught;

and when larger ones take the flies, the tackle is broken ; but at this season of the year the young fish of the previous year are chiefly those which congregate together in these localities, and are taken.

When the autumn arrives, these fish become heavy and powerful, and a different style of fishing is adopted, and different tackle brought into requisition to secure them. They are then known as steinloch ; but I have explained, in a former chapter, the method of taking these. Those from one to three pounds give capital sport, being remarkably strong for their size, and vigorous in their resistance. Three persons in each boat will suffice—one to manage the rods, and one to each oar. Six rods may be used effectively. They ought to be from 12 to 15 feet in length, three-fourths alder, and one-fourth, i.e. the top, of hazel, which must be firmly spliced on. By this combination you have a light, manageable rod, with strength and flexibility where they are each required. The line must be of the same length as the rod ; on no account longer, as your continuous sport depends much upon your expeditiously lifting your fish into the boat with the strength of the rod and line with the first impulse, without the fish being allowed to strike the side of the boat ; which would be the case with too long a line, involving a loss of one-third of the

fish hooked, and interfering with your prompt attention to your other lines, on each of which there may be fish, as it is no uncommon occurrence to have a fish on each line at the same moment. Dispatch, therefore, is essential to success, and he is the most skilful fisherman who can bring his fish most readily into the boat, unhook them, and replace his rod and line, and accomplish this without interfering with the other rods and lines lying closely in juxtaposition: and as the fish follow the boat, attracted by the flies, the more quickly you can get your lines into the water, after having secured your fish, the less liable will you be to lose the shoal which is following you, as, strange to state, the hooked fish which are plunging about in the water do not in the slightest degree alarm those which are following your flies.

Your line must be made of strong horsehair; the more joints and fastenings in it the better, as these, in meeting the current, make seams and marks in the water, which attract the attention of the fish to your flies. At the end of your line one piece of gut, to which your fly is attached, will suffice; and this must be of the best quality, as it must be recollected that this is intended to bear a fish of three pounds weight, there being no time for the use of gaffs or landing-nets. The hook must be the size of a salmon-hook; a white

tin one; black hooks do not answer so well. The fly is formed of one feather, of about three inches in length, fastened firmly on the upper side of the shank of the hook; not all along it, but only at the extreme end, so that almost the entire length of the feather is at liberty, keeping parallel with the hook as the boat advances through the water. The feather must be a perfectly white one, taken either from under the wing of a large white sea-gull, or from out of one of the tail feathers; if from under the wing, three inches of the fine end of the feather; if from a large tail-feather, it will be a part selected from the side, of the same length. This feather is supposed to imitate a small young fish.

The person who manages the rods will sit on a plank across the bows of the boat, as near the stern as he conveniently can, with the ends of the rod inserted into a small faggot tightly fastened underneath the plank on which he is sitting, so that he will have all the rods within his immediate control; the gentle and regular progress of the boat keeping the lines at full stretch, so that the fish on taking the flies hook themselves. When the fish take very freely, two persons will do more execution with the rods than one.

The amateurs of this exciting sport in fine weather generally assemble on the island an hour

before sunset, draw their boats up on the rock, prepare their flies, chat, and smoke their pipes till the wished-for moment arrives, when there is a simultaneous movement towards the boats, and in a few minutes they are all afloat. This moment, most exciting to those who are fond of the sport, must be witnessed to be appreciated. At the time of the sun's disappearance below the top of one of Jura's mountains to the west, the smooth and glassy intervals between the currents present an unbroken, speckless, mirror-like surface, when, after an interval of about ten minutes, the golden track of the sun's descent being no longer visible, in an instant, as if by magic, a thousand bubbles and small circles are perceptible, indicating the arrival of a host of fish at the surface; and to these spots all the fishermen speed their way, rowing backwards and forwards through them at a gentle pace; and if the fish be in good humour for taking the fly, which is generally the case if the evening, or rather night, be fine, each person who has the management of the rods will have continuous occupation, excitement, and sport till half-past ten, eleven, or even sometimes as late as twelve o'clock; following the fish from one favourite spot to another, as every now and then they disappear from one place and exhibit themselves in another; so that the rowers have as much excitement in the pursuit as the man at

the rods, in the taking of the fish. At eleven or twelve, when the first act is over, the boats retire to the island, and await the morning's fishing; which is as good as the evening's, only not so durable, as it commences at two and finishes about four—i.e. half an hour before sunrise. When the fish take freely, I do not know any kind of fishing more exciting than this nocturnal rod-fishing; as it will constantly happen that you will have a fish on each rod at the same time, pulling with all his might, and bending the point of your rod below the surface of the water, and sometimes it happens that one escapes with a rod and line, and then you are obliged immediately to pursue your rod if you do not wish to lose it. If it gets into the current it is no easy matter to overtake and recapture it: but this rarely occurs, as the fish when hooked generally take a perpendicular direction, and not a horizontal one.

As a general rule, whenever there are any herrings in any loch, sound, or by the coast, every other kind of fish is plentiful; and when they disappear, fish are scarce for a season. The herrings in the Sound of Jura, and in the contiguous lochs, are small and very inferior to those taken in Loch Fine, which are perhaps the largest and best-conditioned caught anywhere. They are taken by thousands and despatched in boxes by

the steamers to Glasgow, Liverpool, and elsewhere, a small quantity of salt being sprinkled between each layer.

THE SPLASH NET.

THIS net affords excellent sport; it is not so effective as a drag net, but is more manageable, demands less trouble, and requires fewer hands. All sorts of fish may be taken in it. At night it may be used for salmon and salmon-trout, and in the daytime for mackerel and for any other fish which may be in season. To take salmon and salmon-trout with it at night, you must approach those parts of the shore, either in the sea-water lochs, or on the sea coast, where any burn or rivulet empties itself, with the same caution as is required in the use of the drag net, by commencing your operations as silently as possible. The net must be properly arranged at the stern of the boat, across a plank made for the purpose, with the corners rounded, so that there may be no impediment to the letting out the net with speed and facility. One person can perform this operation.

In the *first* instance the net will require wetting, as it will not go out well when perfectly

dry. A stone, of sufficient weight to keep the net fast and steady when in the water, must be fastened to the lead line at each end: the first stone must be dropped close to the shore. Take care always to have your lead line on the side you are enclosing. After the first stone is dropped, the person rowing the boat will proceed as quietly as possible, and as quickly as the lowering of the net will admit of, to the point which you intend making; when this is reached, the other stone may be thrown out as near the shore as possible. If the lead line goes down well, the cork line will generally take care of itself. Having enclosed the space you wished, you will commence rowing backwards and forwards, and making as much disturbance as possible in the water, in order to drive the fish into the net, as those fish which do not strike in the first instance will do all in their power to avoid getting into the net, either by leaping over the top or by passing by the sides, if there be the smallest possible intervening space; but the largest and best fish generally go into the net at once, and, when once in, are safe enough, provided the net be taken up properly; and this must be done by two persons, especially when it is intended to reset the net, one taking in the lead, the other the cork line. This must be done simultaneously, the lead line being kept a little higher than the cork one; by

which means a bag is formed, preventing even the smallest fish from escaping, as, in addition to salmon and salmon-trout, very fine flounders and codlings are frequently caught.

When it is intended to continue splashing during the night, the net must be taken in carefully on each occasion, the lead line being folded backwards and forwards on one side of the board ; the cork line, in a similar manner, on the other side. When this is well done, the net will, on the following occasion, go out of itself as the boat advances, with merely a slight pressure of the hand to keep it in its place.

To use the *splash* advantageously at night, the tide and weather must both be in your favour ; and you must previously, in the daytime, have made yourself thoroughly acquainted with the nature of the shore where you intend to operate, otherwise you might be disappointed, and expend your labour in vain. The night must be perfectly calm and still, and, in the next place, it must be low water ; and if it happens that the moon is in that quarter in which there is little tide, so much the better—you will have a longer time for your sport and a better chance. Immediately after sunset, salmon and salmon-trout approach close to the edge of the shore, in those places where the fresh water descends, especially if the tide be ebbing ; so that you may then commence

your operations if favoured in this respect with a prospect of success. The larger space you can enclose with your net the better; but you must take care not to get your net into too deep water, bearing in mind exactly how far you may venture from the shore, guided by your previous examination of the coast; as sometimes the bottom shelves off suddenly, so that if the net were dropped into too deep water, the lead would not reach the bottom, and the fish would escape under it.

In those places where you cannot have the advantage of any side of the shore to drop the end of your net upon, but are obliged to fish parallel to it, it is a good plan to drop the net in at one end in a semicircular form, and to splash from the other end, at right angles to your net, backwards and forwards. The net, in the first instance, must be dropped in as silently and expeditiously as possible, and the splashing commenced instantly you reach the end of your net, and carried on vigorously. I have frequently seen this plan adopted with great success.

In those lochs where the water is deep, and where the construction of the shore is such as to admit of no facilities of using this net in any of the ways above described, then a very much larger, longer, and deeper net is required to give you anything like a chance; and many circumstances must conspire to ensure success, especially

if the neighbourhood be such as will not admit of your leaving your net out through the night with safety. The tide must be low, the night not too bright, and, if there be a slight breeze, so much the better, the net can then be placed in those parts of the loch where you know salmon and salmon-trout are in the habit of passing to the fresh water ; one end of the net as near the shore as possible ; a small anchor at each end to keep the net tight, otherwise the fish will not mesh. Having placed your net, you must remain at one end of it in your boat ; and can examine it at the end of one or two hours, or whenever you hear fish strike. On some nights, when the fish are on the move, many may be taken in this manner ; but success is uncertain, and waiting rather irksome : but in a loch of this description you have no alternative.

When mackerel are in the loch, this net may be left in all night, and visited the first thing in the morning. If a shoal happens to pass, a large quantity may be taken. From one to three hundred I have known caught and taken in one night ; at all events, if in the height of the season, a score or two may be constantly secured in this manner almost every night. The net may be placed at right angles to the shore, where there is little or no current. A small anchor, or stone, must be attached to each end, so as to

keep the net tight; the end which is near the shore must be as close in as possible, so as to admit of no intervening space, as all fish pass near the shore; and this you will soon discover if your net be well set, by finding the bulk of the fish taken at this end. If you have seen mackerel playing during the day near the shore, you cannot do better than to place your net there just before sunset. The net may sometimes be left for days very advantageously in the same place, and visited at intervals; but it ought to be taken out every third day, and be thoroughly dried, and remain out at least for twenty-four hours, as if constantly allowed to remain in the water it would soon become rotten and useless. At the end of every season it ought to be well soaked in bark and catechu, and when thoroughly dried, hung up in a perfectly dry place; by this means, and with proper care, a good net will last for two or three seasons. A good net of this description will cost from 3*l.* to 5*l.* When this net is not in use, it ought occasionally to have the benefit of the air on a fine dry day, this being essential to its preservation; and when hung up within, ought to be out of the reach of rats and mice, as they would seriously damage it if they could get access to it; and a precaution of this nature is necessary, as rats abound by the sea shore, where houses and farm-buildings are contiguous.

FRESH-WATER LOCHS IN SCOTLAND.

THE fresh-water lochs in Scotland abound in trout, and afford excellent sport to those who are fond of fly-fishing, and who prefer numbers to size; as the trout are generally numerous, but small, so that many dozen may be taken on any favourable day.

In some of the largest and deepest lochs, trout of three, four, and five pounds may be taken; but these large fish are neither so abundant, nor are they so easily taken; in fact, they are rather difficult to take, except with a particular fly, or by trolling. The fish are of excellent quality, although their exterior is very dark. The lochs containing these superior fish are so very rare on some moors, that perhaps out of a dozen, eleven will contain only small fish.

If you are not contented with the productiveness of the rod, you may try a more wholesale implement, called an OTTER. This is made of wood or cork; the latter material, however, being decidedly the better of the two for the purpose. Its length may be from one to two feet, and half that measure in depth; breadth, one inch; the shape, that of a boat; a piece of lead screwed into and along the bottom, so that it may move perpendicularly. On one side you must have a small strong wire rail, about four inches in length,

projecting about one inch. On this there must be a small ring, to which you will attach your line; by which means you can draw the otter to either the right or left. The end of your line ought to consist of three or four yards of strong gut. To this you may attach your flies, at intervals of from two to three feet; a dozen or more flies, as you may think proper. Your gut end must be attached to a good line, which you can manage with a strong rod and multiplying reel. To work the otter effectively, there must be a slight breeze; the moment it is afloat, it will move off spontaneously, and may then be directed as you desire, as you walk slowly, by your management of the rod and reel; so that you may fish either at a distance in the middle of the loch, or by the sides, as you judge best. You will readily perceive the fish rising and hooking themselves, and can bring your otter in whenever your line is sufficiently loaded, and you are in a good position for the purpose.

Experience will soon teach you the most effective manner of using this wholesale implement.

On some waters the use of it might be considered unfair and poaching; but on these Highland lochs a benefit is conferred by the removal of these small trout, as their very superabundance is the occasion of their being so diminutive. It is useless attempting to fish with the otter on a

bright sunny day, except there be a strong breeze; and then it may succeed when a rod would fail: but a warm, mild, cloudy day, with a slight breeze from the south-west, is most favourable. The north and east wind are altogether adverse to success.

Most of the rivers in Perthshire afford excellent sport to those who are fond of first-rate trout and salmon fishing with the rod; and perhaps there is no amusement more attractive, exciting, and fascinating to the genuine sportsman than the latter; at least, if we may be allowed to judge from the numerous admissions made in its favour by those who have luxuriated in all the pleasurable and recreative excitements which wood, hill, field, plain, and mountain afford, either with the gun or in the chase. To throw your fly over a good pool of water softly agitated by a western breeze, and undulated by a progressive bubbling current, slightly tinged by a recent shower, the former co-operating with the latter to produce precisely that ripple which you require, with the prepossession that there are heavy salmon, causes as much pleasure and interest to the fisherman, as he cautiously approaches to make his first cast with his fly, as the drawing of a first-rate cover with a pack of foxhounds to the foxhunter, with the certainty of a find. And when a good fish is hooked, the excitement is

perhaps not less than that produced on the finding of your fox; neither is it less durable, although more continuous, if I may be allowed to use the expression, as you have no checks with your salmon; your skill, vigilance, assiduity, and anxiety being of necessity unremittingly on the stretch until you safely land your fish, because, like the fox, the salmon may elude and disappoint all your efforts in the expected moment of victory; both accidents happen sometimes, greatly to the annoyance of both the fisherman and fox-hunter. The accomplishment of each victory frequently requires about the same time. Forty-five minutes to an hour over a good country at the best pace is considered a first-rate run, when you run into and kill your fox in good style; and a heavy salmon will sometimes require the continuous exertions of the most expert and skilful fisherman for the same amount of time before he can safely land him. A fish of nine or ten pounds may be killed in a quarter of an hour, and you may sometimes run into your fox in the same time, and the shine be considerably taken out of the best of horses, as the agitated state of their tails often testifies; these short and decisive runs being generally most severe.

It is vexatious to lose either your fox or salmon just as you are expecting to kill either the one or the other: but both will sometimes escape;

the salmon, just when you are about to land him and he appears quite exhausted, will make one convulsive leap out of the water, and as he falls you have the mortification of finding your line slack, and perceive your fish moving off. In the same manner with your fox, after a burst of three-quarters of an hour, your hounds will throw up in an instant, on the high road or at the entrance to a village, baffling all the efforts of the most skilful huntsman to get upon his line again or discover the place of his refuge. Sometimes a flock of sheep may be the innocent cause of his escape; sometimes a drain or hollow tree may conceal him. This is not often the case; but it does occasionally occur, sly reynard having been seen by some countrymen emerging from his hiding place and making good his retreat after the field had taken their departure. In such an emergency, if the day be not too far advanced and a likely cover be within reach, a fresh fox may be drawn for and found, and a good run had, terminating auspiciously, thus obliterating the former disappointment. And in like manner the fisherman may try a fresh pool, and hook and kill a fine salmon, and after this one several others; so that he has more sport, as far as it goes, than the foxhunter, and a remedy for any disappointment more readily at hand. Still I do not think the fisherman gets over the loss of a good fish so easily as

the foxhunter reconciles himself to the loss of his fox; as the latter has had what he principally desired, in having had a first-rate run; and if reynard has escaped, he enjoys the anticipation of killing him on the next occasion, after having had another good day's sport with him. But even in this he may be deceived, as I have known one particular fox defeat a first-rate pack during the whole of one season, unless he was killed quite at the end of it on a foggy day, when he was found in his usual cover, and the hounds left the whole field in the lurch, the pace having been so great that no horse could live with them, and the fog prevented their direction being pursued. As the fox was never found subsequently, it was presumed that he was killed on that occasion.

It may be asked how a particular fox could be identified. In this instance it was easily done, as this fellow had lost the greater part of his brush. Those who are passionately fond of fox-hunting, and have never enjoyed the sport of salmon fishing, will, in all probability, consider it absurd to institute any comparison between the two sports. I recommend them to suspend their judgment for a few years, and then try what appears the less exciting and more tranquil amusement, and I do not think they will withhold from salmon fishing its claim and pretension to that fascination with which it is credited by its nu-

merous admirers. Perhaps at that delightful period of the existence of a man of fortune so felicitously described by Dr. Johnson, 'when youth rushes forth to take possession of the world,' and everything is or appears to be 'couleur de rose,' then, perhaps, foxhunting will most decidedly bear the palm; but when the fever of this first excitement be over, and the best countries have been ridden across, upon the best of horses, first-rate sport enjoyed, and perhaps a dislocation occurred, and a bone or two broken, and some dozen years elapsed, then salmon fishing, if it can be enjoyed on a first-rate river, with all necessary appliances and requirements, will come in for its due meed of praise and just appreciation.

I will not pretend to give any instructions as to the best mode of throwing a fly, hooking and killing a salmon, as I am of opinion that these accomplishments must be derived from practical experience, and cannot be imparted verbally.

Every man, before he attempts salmon fishing, ought to try his hand at trout fishing; and when he has learned the best method of killing large trout, he may then test his skill and experience with salmon. There is, of course, considerable skill in throwing your fly well and judiciously; but if you have first-rate tackle, this art is easily acquired; the great trial comes when you have hooked a good fish; then a good hand and

eye, the utmost vigilance, and some patience are demanded to make up the amount of skill required. You must watch every movement of the fish so as to be ready to relax the line instantaneously when he leaps out of the water, otherwise you may lose him. The principal tact consists in judiciously relaxing and contracting the line, and maintaining your rod in a proper position; by which operations you fatigue and ultimately kill your fish before you can venture to draw him up to a suitable part of the shore to be gaffed and landed by your attendant. This is sometimes a dangerous moment, as salmon will frequently, when apparently quite beaten, make a violent and sudden effort, by leaping out of the water; so that your vigilance must not be suspended till you see the gaff in his gills.

SALMON FISHERIES.

SINCE writing the preceding chapter an immense improvement has taken place in most of the rivers in England, Scotland, and Wales, under the salutary influence of the several Acts recently passed for their protection. The sportsman will have much better sport than he has hitherto enjoyed, and the public at large will be considerably benefited, as salmon, which has hitherto been an article of luxury for the affluent, will now become one of food for all classes: last year Severn salmon

was so abundant in the vicinity of the river that it was sold for 8d. a pound. This fish has often produced 3s. 6d. and 5s., and sometimes more, per lb. in London, and Scotch salmon 3s. If the new laws prove as effective as I expect they will, salmon will be reduced to 6d. a pound when the middle of the season is reached. There was no mystery as to the cause of the decrease of salmon, and there will be no difficulty in effecting its increase, and in having as abundant a supply as the rivers are capable of affording.

No artificial means are required to resuscitate the stock in those rivers, which have been impoverished by gross abuse; only give the fish fair play, and the rivers will swarm with them; art can not compete with nature, and it will soon be found, when the rivers are properly protected, that their produce will be so great that the artificial means which have been resorted to for their replenishment will be abandoned as superfluous. There were several causes of the decrease of salmon, all of which the Acts recently passed will, I trust, remove—Firstly, the obstructive as well as **destructive nature** of the fixed engines for the capture of salmon, in the shape of stake-nets, bag-nets, and crives. Secondly, the indisposition which these fixtures occasioned on the part of the proprietors of the upper parts of the rivers to protect the salmon in the breeding season.

Thirdly, the influx of deleterious matter from manufactories, paper-mills, and gas-works, whereby the fish were poisoned and destroyed. This last evil is so great, that its removal must be the first condition on which any reasonable hope of improvement can be based, consequently the law is imperative on this point. Hence, to have our rivers exempt from pollution is the first step towards the regeneration and preservation of salmon, and the next is to clear away all obstructions to the ascent of the fish at all seasons, for the clean fish as well as for the breeding; the third to ensure their protection during the breeding season. The fulfilment of the third condition depends on the second, simply because by the removal of all obstructions the upper proprietors obtain their share of the fish, and consequently have an interest in protecting them during the breeding season; when stake-nets, bag-nets, and cruives were in full force, the upper proprietors, in whose waters the fish were bred, being precluded from the chance of having any clean fish on their return from the salt water, naturally became indifferent as to the protection of the breeding salmon, so that the scarcity of this valuable fish arose more from the indisposition of the upper proprietors to protect the fish in the breeding season, and to save them from destruction by poachers, than from the destructive character of the fixed engines.

Their reply to any charge of neglect, was, 'Why should we protect the breeding salmon when you, lower proprietors, will not allow us to have any clean fish? Why should we breed the fish exclusively for your advantage? Give us our share of the fish, and then we will co-operate with you in protecting them.' The reply and remonstrance were equally natural and reasonable—the lower proprietors surely can capture, by movable engines of various kinds and descriptions, quite as many fish as they are entitled to. Some of these stake-nets which were on the sea coast were three miles in extent, and generally not far distant from the mouth or estuary of some large river, so that the greater part of the clean salmon which were directing their course towards the river for the purpose of ascending it, were as a matter of course intercepted; thus, the bounty of Providence, intended for the benefit of the community at large, was intercepted by one cormorant who frequently possessed nothing beyond what the law calls a prescriptive right, i.e. a right obtained but too frequently by an encroachment on property belonging to the crown, as on all sea coasts that space of land which lies between the ebb and flow of the tide belongs to the crown, consequently, to a certain extent, is public property. When it was first proposed to do away with these fixed engines, the *soi-disant* proprietors of them were

most clamorous for compensation; but, morally speaking, the public, who had for so many years suffered the infliction of a great injury, had a far better claim to compensation; but I regret to admit that the high legal authorities took a different view of the matter, and decided otherwise; so that it would appear that a privilege of this character illegally obtained, if it has been enjoyed without question or interruption for a certain number of years, becomes a prescriptive right. So much for the anomalous condition of our laws.

Some of the proprietors of stake and bag-nets had really legal rights, as they were derived from grants from the crown, but a considerable number of the most clamorous of these cormorants had merely prescriptive rights acquired by encroachments on public property. Excellent arrangements have been made as to the close time in the appointment of water bailiffs and other officers for the protection of the rivers during that season,—this was a most necessary measure, as it was found that large quantities of unclean fish were captured by poachers for the purpose of exportation. The number of boxes of unclean fish destined for consumption in Paris is almost incredible. This abominable traffic, I trust, has now been effectually put a stop to, so that no attempt will be made to resume it.

The privilege of rod fishing conceded to the Angler after the close time, will, I am convinced, also be attended with good results, as his presence will prove a great restraint on the operations of the poacher, and the few fish which he may capture will be comparatively of little consequence; and as a matter of course he will return all unclean fish to the water.

TRAWL, OR DRAG-NET, FOR SALMON AND SALMON-TROUT.

THIS net is used after sunset, and through the night, if the weather be fine and suitable; it is most effective for taking salmon and salmon-trout. The best time to commence operations is when the tide is beginning to flow. Four men are required to draw the net ashore. The spots in the loch resorted to by salmon and salmon-trout, at the rise of the tide, are those close to the shore, where any burn or rivulet empties itself; and these must be approached in your boat as silently and cautiously as possible, so as not to alarm or disturb the fish. Two men will get into the water on one side near the shore, with one end of the net, one having the upper, the other the lower rope; you will then row to the other point which

you wish to make, and let the other two men down with the other end of the net; all parties will then commence simultaneously dragging the net ashore. You will very soon know whether you are successful or not, by the leaping and splashing of the fish enclosed. The person remaining in the boat, as there must be a fifth, will follow the net as closely as he can, in order that he may be ready to lift it off any stone or sea-weed with which it may chance to become entangled.

Before commencing this sport, it will be necessary, during the day, to reconnoitre perfectly the scene of your intended operations, so as to be thoroughly conversant with the nature of the shore; by which means you will know exactly where you may let your men down into the water; and sometimes it will be necessary to remove branches of trees, and other obstacles, which may have been brought down accidentally by the fresh water, as these, although small, if allowed to remain, might not only defeat your manœuvres, but tear and damage your net. Do not attempt to enclose too large a space, or commence in too deep water, as the fish might escape by the sides before you have time to enclose them.

LONG LINE FOR COD, HADDOCK, CONGER EEL, ETC.

THIS line is productive of excellent sport in any loch where cod and haddock abound. The season for these fish commences in November, and extends through the winter months. As the season advances, these fish gradually approach the mouth of the loch and proceed out to sea as far as the nearest bank, where they may be as easily taken as in the loch, subject of course to the suitableness of the weather. In the loch, in ordinary weather, a small well-built boat of from ten to twelve feet will be perfectly safe, especially if built expressly for this purpose; but in the open sea a much larger and stronger boat will be requisite. The long line may be from five to six thousand feet in length; one of six thousand feet would take five hundred hooks, and these must be twelve feet apart. The lines to which the hooks are attached are called snoodings, made of strong whip-cord three feet in length; the hooks the ordinary size sold for cod fishing. The best bait is fresh herring. If you cannot get these, then salt ones, after being well soaked, will be a tolerable substitute. One herring will make three baits. The head must never be used.

It will require time to bait this line and arrange it properly in a basket for setting. Two buoys will be wanted, one at each end of the line, attached by a separate cord. The best time for setting this line, if fish are abundant, is at break of day, allowing it to remain in about three hours; if, however, fish be scarce, then it may be set in the evening and taken up the first thing in the morning. You cannot be too particular in this respect, as you may have taken some large conger eels; and although they may have remained perfectly quiet till morning, yet as soon as daylight appears they commence their endeavours to liberate themselves; in which attempt they are very likely to be successful, greatly to the prejudice of your line.

Having ascertained the best place for setting your line, and having it baited and properly arranged with your two buoys, with a cord to each end of a hundred feet in length, or more, according to the depth of the loch, and two good-sized stones of sufficient weight to keep your line steady when set, you will proceed with your boat with two men, as one man would not suffice if there were anything of a sea. When arrived where you intend commencing, you will set one of your buoys afloat, it having been previously well filled with air and attached to one of the cords; to the extreme end of which you will

fasten one of the stones and the end of the line, letting the same gradually down till it reaches the bottom, when the men may commence rowing the boat in the direction you desire as fast as the letting out of your line will admit of, taking care to keep the line tight during this operation. When you reach the other extremity of your line, you will fasten the other stone to it, and, after having attached the cord to it, to which the other buoy is appended, you will let the stone gradually down, and then as you row off you may set the buoy afloat; it will soon find its proper position.

If the two stones are of the proper weight, the line will lie steadily between its extreme points, and offer sufficient resistance to hook the fish when they bite. Be very particular in fastening the stones securely. When you return to take up your line, you can proceed to either buoy, being guided in this respect by wind and tide; and having secured one, draw in the line over your hand till you reach your main line with the hooks, you will then draw up the stone, and, having removed it, fasten the end of your line to the side of the fish-basket or box; you will then commence gradually drawing up your fish, the man or men rowing keeping the boat in the position you wish.

Do not allow your line to become slack; and as you draw it in, place it carefully and regularly in the basket, after the fish have been removed. The

latter must be gaffed as soon as they reach the surface, and lifted into the boat, there being an experienced person *expressly* for this purpose; for this operation must be performed cleverly and promptly, or many a fish may escape, especially the large conger eels, whose throats it will be advisable to cut the moment you get them into the boat, as they are very savage and will sometimes make a disagreeable use of their teeth. Never attempt to lift a fish of any size into the boat with the line. The person who gaffs the fish ought to unhook them immediately they are in the boat, and till this is done you ought not to proceed in taking up your line.

With this line, in a good season, you will frequently fill your boat with first-rate fish. In addition to cod, haddock, ling, and conger eel, very fine large skate are taken; and when in condition and of the first quality are an excellent fish. In cold, frosty weather these fish are considerably improved by being hung up in the open air for several days; having, in the first instance, been skinned, the bad parts cut away, the remainder thoroughly cleaned and washed. Besides skate, various monsters of the deep are sometimes taken, more curious than serviceable.

The most amusing part of this fishing is the taking in of the line, although some consider the gaffing of the large fish equally so; and perhaps it is more exciting, especially where a

large conger eel is in question, as from their tortuous, rapid, and violent evolutions, they are difficult to gaff exactly as you desire, and care is necessary in depositing them in the boat, so as, in the first instance, to avoid their teeth, before they are rendered harmless, this act being immediately necessary for your security; but the person who performs this operation will find a pair of water-proof over-all's indispensably necessary, or a pair of long fishermen's boots, and also a thick pair of warm woollen gloves. In some of the lochs in the west of Scotland the cod and haddock are very fine, being weighty and of first-rate quality. I have taken the former from 20 to 30 lbs. weight, and the latter from 5 to 8 lbs.

On one occasion, having visited a neighbouring loch in company with a friend (in the month of November), with the assistance of three men, and the use of a good boat, with our long line baited with salted herrings, as we could not procure fresh ones, we made two ventures, leaving our line in, on each occasion, three hours, and caught thirty fine cod and seven or eight haddock. Many of the cod were 25 lbs. weight, and some few 30 lbs.—none less than 10 or 12 lbs. weight. The haddock were from 5 to 8 lbs. weight, and as good in every respect as the Dublin Bay ones. If we had had fresh herrings, I am convinced our success would have been considerably greater. Our line had 500 hooks.

LONG-LINE FISHING FOR HADDOCK, COD-LING, WHITING, FLOUNDERS, ETC.

THIS line needs not be either so long or so strong as the one used for larger fish. If you have 500 hooks, which is a fair quantity, your line must be 1,500 feet in length; the snodgings on which the hooks are fastened being only three feet apart: these are three feet long; two feet of strong whipcord, and one foot of horsehair; the hooks of moderate size, the common tin ones being the best. This line can be bought ready made at any of the fishing-tackle shops in the large towns of Scotland. They are sometimes made with as many as 1,500 hooks; but a line of this size could not be baited and arranged for setting under an entire day, even if two skilful hands were employed; and two are requisite, one for the purpose of opening the mussels, the other for putting them on the hooks. For one man it would be an endless task; but a line of 500 hooks is sufficient to take a good quantity of fish, and show excellent sport; better, I have always thought, than the stronger line, as you take more fish, and a greater variety, though the weight will be considerably less.

The only bait for this line is the mussel; and

some skill is requisite in opening the shell and putting the bait securely on the hooks. If it be badly opened, or unskilfully put on your hooks, even if well opened, you may lose all your baits and take no fish ; you must, therefore, take care to get a person who thoroughly understands baiting the line to perform the operation. In the first place, the mussels must be taken out of the shell entire ; especial care being taken not to cut the head in half, as the hook must be passed through the head, that being the only hard part capable of holding it, and then twice through the body, the latter being twisted round, so as to cover the point of the hook ; with this precaution the bait cannot be taken without the fish being caught.

This line is set precisely in the same manner as the larger one, with two buoys and a stone at each end ; but there is some difference to be observed as to the time of setting it, and also as to the length of time of its remaining in the water. The best time for setting this line is at day-break. If there be plenty of fish in the loch, one hour will be quite long enough to allow it to remain ; if fish be scarce, then two hours ; but on no account longer, as skate, large cod, and conger eels would take your whiting or small flounders, and break and damage your line, this line not being strong enough to hold heavy fish.

It will hold haddock well enough ; but even these, when large, must be humoured and played with as you draw them to the surface, always having some one ready by your side with the gaff, to hook and lift them out of the water.

When the line is carefully taken up and deposited methodically and regularly in the basket, it requires comparatively little time to prepare it for rebaiting and resetting ; but if it be taken up in a careless and slovenly manner, and the fish not unhooked regularly, it will require hours to disentangle it. On being brought home it ought to be hung up immediately to dry, on a bar of wood placed horizontally between two poles ; out of doors if the weather be fine and dry, within doors if it be damp or wet. Without this precaution it would soon become rotten and useless. When perfectly dry, it may be placed in the basket ready for rebaiting. This line, like all others, and nets, must be always kept out of the reach of mice and rats, especially when it is baited overnight, ready for setting in the morning. You cannot be too particular in this respect, the fresh mussel being an additional attraction.

DESTRUCTION OF VERMIN.

THE preliminary measure towards the preservation of game is the destruction of vermin; without it, other efforts and expense will prove entirely unavailing; and as this end can be attained by the adoption of proper means through the instrumentality of assiduous and competent keepers, I will endeavour to explain some of the methods which I have known to have been adopted with the greatest success. I will, in the first place, commence with ground vermin, viz. common cats, polecats, stoats, weasels, badgers, &c., these being the greatest enemies of grouse, partridges, pheasants, and hares. After having disposed of these, I will invite attention to flying vermin.

Of all ground vermin, the common cat, when once addicted to prowling, is by far the worst and most destructive to game, especially to partridges when they are breeding. A keeper must therefore make a point of destroying these prowlers on the very first opportunity, as when once given to prowl, they never relinquish the habit, and prefer killing their own food to being fed at home; fortunately for preservers of game, they are easily caught. For them, as well as for all other ground vermin, no trap is superior to a common steel

trap. Care and judgment are requisite in setting it, so as to answer your purpose and not to take game, or to admit of its being interfered with by sheep or cattle.

The best trap is one of the ordinary size, about four inches in breadth, and five inches in length. Be particular, when you buy your traps, to select such as are properly made, as they are frequently put together in so careless a manner as to be almost useless. The strength and temper of the spring must be ascertained ; it should be curved, and fixed to the bottom plate by an iron pin. The curved springs will last for years, and seldom or never break, their tension being general ; whereas the flat springs, from the tension being chiefly in the centre, are constantly giving way, and thus occasioning expense and disappointment. When the trap is set, the drop or plate should lie evenly and horizontally between the teeth ; if it be either below, or above, or oblique, it is faulty, and ought to be rejected. In setting, the catch must be regulated by the weight of the vermin you expect to take ; it can be set so lightly that a mouse may spring it, or otherwise, according to circumstances. A keeper who understands his business will easily find out where cats or any kind of ground vermin are in the habit of resorting, by carefully examining, on the morning after a

shower, and on all other suitable occasions, the gateways, roadways, and other passes, for the footmarks of the enemy, and, when found, he will do well to set his trap under the hedge, wall, or by the side of the nearest ditch to the pass or run. The trap must never be set *in* a run or pass, as it might take game; and it is not at all necessary to be placed there, as any vermin, in passing a run, will scent a well-baited trap at a long distance.

The best season for trapping is during the months of February, March, and April; the vermin are then on the move, and by killing them at this period of the year, before they commence breeding, you get rid of a generation of enemies. Having selected a favourable spot, you will cut away the earth so as exactly to receive the trap, in such a manner as, when set, will admit of its lying perfectly even with the surface of the ground; you will then drive the stake, to which your trap is fastened by a chain, firmly into the ground. After having done this, if your hand be not sufficiently strong for the purpose, place your foot carefully on the spring of the trap, gradually contracting it; you will then easily fix the catch over the side of one of the jaws to the drop or plate, so as to hold it firmly in its proper position.

Whilst you are removing your foot or hand from the spring, to secure your fingers from the

risk of being caught, in the event of the trap being accidentally sprung, place a small stick under the plate; this will hold it firmly, and enable you to set your trap as you desire, and cover it in such a manner as not to be perceived. When *this* is done, you may carefully withdraw the stick from under the plate. Not only the trap, but the chain and top of the stake must be perfectly covered, so as not to be in the slightest degree perceptible, either with grass or moss, or with whatever the land contiguous may be covered. The grass which covers the plate and teeth must be cut with a sharp knife into minute portions, so that on the trap being sprung it may close without impediment, and no part of its covering remain between the teeth. The bait ought to be on the top of a stick, inserted firmly into the ground, in the rear of the trap, from four to six inches above it, by which means it is scented at a long distance on either side of it. If the trap be set under a wall, large stones may be placed on either side and over it; if stones be wanting, then bushes; so that the vermin cannot get at the bait without passing over the plate of the trap. In a country where there are walls you will always have stones at hand for the purpose; there is no place equal to the side of a wall for a trap, especially at the corner near any ditch,—under a wall and the sides of a ditch being

favourite runs for vermin. A few yards distant from where a drain passes under a wall is also an excellent place.

If the trap be set in any open place it must be surrounded by bushes, leaving one small opening. The keeper must visit his traps regularly every morning at daybreak, so as to prevent the escape of any vermin that may be only slightly caught, and also in order to prevent their being interfered with by boys or other persons who may be on your grounds. The best bait is the inside of a rabbit or fowl, part of a wild duck or green plover; if you cannot get these a blackbird will do, but it is not so attractive a bait as the former. A wild duck will make four baits, a plover two. The same bait will sometimes last a week or ten days. If no vermin be caught, the traps had better be sprung and reset every second or third day; as by their remaining in one position any length of time they may become inoperative from rust. The man who attends to them should always have in his game-bag a file, a small hammer, and a bottle of oil, all which articles are required in extensive trapping. The same system of trapping can be adopted on the moors, placing the traps near large heaps of stones, or near rocks, or by a ditch or rivulet side, great care being taken to protect them from the encroachment of sheep.

In large woods where traps are kept up per-

manently, wooden hutches, similar to those used by warreners for rabbits, are very serviceable; but these are expensive, and require time and trouble to place them, but when once fixed may remain the year round. The best situation for them is in an old, unfrequented road, in the centre of which they ought to be placed, with a hedge on either side about eighteen inches in height, carried to a distance of six or eight feet. These traps can be made by any village carpenter, from oaken or other slabs; the former are, however, the best, being more durable. The bait must be in the inside of the trap, hung up immediately over the drop or plate; so that the former cannot be reached without the latter being trod upon by the vermin; in which case the doors instantly fall, securing the enemy. The doors of the trap should not be raised above three inches; if higher, pheasants or hares may enter and be caught; and, in consequence of this liability these traps must be constantly looked after, as it is not an uncommon trick on the part of poachers to visit them in the evening, set them higher, and come early in the morning and help themselves to any game which may be caught. The inside of the doors should be lined with tin, to prevent the vermin from biting their way out. There should be a small sliding door at the top of the trap, through which the bait may be intro-

duced and fixed ; it will also admit of your ascertaining the nature of the prisoner when the doors are down. If you have vermin dogs with you, you can open the doors, and allow them to settle the account ; if you are without them, raise one of the doors about an inch, or rather higher, as may be necessary, according to the size of the delinquent, who will immediately on seeing the light try to make his escape ; which you will prevent by securing his neck with the door with one hand ; a heavy stick in the other settles the account.

When in quest of badgers, if you cannot find their earth, search for the place where they have recently been feeding ; which you will easily discover by the upturned earth where there is cow-dung, as they work there in quest of beetles, on which they chiefly subsist. They are not very destructive of game, except when they have young ones ; and then they take eggs, or any young game they may find ; and being offenders to this extent are considered in the light of vermin by keepers, and treated accordingly. The trap for these animals must be set very carefully ; every part of it, and all that appertains to it, must be well covered and concealed ; otherwise they will discover and avoid it, being very cautious and distrustful. They seldom or never come out of their earths the first night the trap is set ; from

which it may be inferred they are well aware of some one having approached their retreat, and are on that account fearful to venture out. Should you not take them on their leaving their earth, and you fancy anything has occurred to alarm them, you may then remove your traps, as they will not return to that earth again, but move off to some fresh abode.

Otters are also easily alarmed, in the same manner, and move off immediately to some distant retreat. For them the same kind of trap may be set, and in the same cautious and particular manner; at the entrance of the earth is the best place; within it, if there be cattle feeding in the immediate vicinity of your operations. Set two traps, if possible, as one may be avoided. Their places of resort are easily discovered by the quantity of work made near their earths, and by their well-beaten tracks to them. They are generally on the banks of rivers, on the sides of fresh or sea-water lochs, or on the sea coast where the coast is rocky. Their earths are mostly under large rocks or stones, or under the root of an old tree. They are not amphibious, as they cannot live under water, although they can dive very well, and remain below the surface a long time; but still they are obliged to come up at intervals for fresh air. Buffon says they do not venture into the sea; but this is a great mistake, as I have fre-

quently seen them swimming and diving in the sea in pursuit of fish, and I nearly caught one one night, in a drag net, when trawling off the sea coast for salmon. I have also found numerous earths close by the sea, with well-beaten tracks leading directly from them to the water's edge, and caught several at these places.

A farmer living on the same coast, on whose veracity I can depend, told me he once witnessed an interesting contest between an otter and a conger eel. He first perceived the otter, at about fifty yards' distance from the shore, arrive at the surface of the water, having fast hold of the eel ; but he no sooner reached the surface, than the eel dragged him under the water again. The contest lasted in this manner for upwards of a quarter of an hour ; the otter, on each succeeding occasion of his reaching the surface of the water, arriving a little nearer the shore ; till at last he accomplished his object, having vanquished his antagonist, and dragged him on shore. The otter was, however, so much exhausted, and so dead beat, after his victory, that he allowed the farmer to approach him in the rear, unheard and unperceived, when he struck him on the head with a large stone, and secured him.

I have also been told by some sailors who were lying at anchor in a smack on the same coast in an adjoining loch, that they have frequently seen

several otters co-operating simultaneously in dragging conger eels from the sea up the rocks to their retreats; thus assisting one another in securing their prey. They are very numerous on the sea coast and on the rocky banks of the sea-water lochs in the west of Scotland. It requires a very good dog to face and kill them, as they are savage and bite sharply, and the old ones possess as much strength as a good-sized dog.

I will now direct the reader's attention to the various methods of taking and destroying birds of prey—viz., hawks, hooddies, jays, and magpies. There are several kinds of hawks, all more or less destructive of game; the most so are the *Hen Harrier* and the *Blue Falcon*. The cock hen harrier, or ring-tail as it is sometimes called, is of a lightish blue, with two white marks or rings round his tail, within an inch or two of the extremity, which is white. There are also two black lines near the extreme points of his wings. His length between the extreme points of his wings is between three and four feet. The hen bird is of a light brown, with the same white marks about the tail and wings as the cock bird. These birds have the credit of making two repasts daily of either grouse, partridge, duck, or plover, and as they only remain where game abounds, they are not often disappointed.

When in quest of game, they may be seen

beating and quartering their ground as regularly as any pointer or setter, crossing backwards and forwards within a few yards of the surface, till they have found their prey, when they instantly descend without the delay or ceremony of hovering over their victims, practised by some others of their tribe. These birds breed and roost in the long thick heather, having their nest on the ground; the eggs, which are whitish, are from four to five in number. As the trap is not always successful, the gun must be resorted to; and this rarely fails, although it may sometimes require time and patience, except in the breeding season, to obtain a favourable opportunity of using it. There are two plans, either of which may be adopted with success. The one is to find out the roosting place, which can be done by watching their flight in the evening, and when you have found that, to go there before sunset and await their arrival, taking care to conceal yourself in such a manner as not to be seen. You may then have a good chance of killing them, as the pair are frequently together. The other plan is to find out their daily beats, as they generally take day by day the same course; and when you have found this, select the best place you can for concealment, from which you may be likely to have a fair shot. You may have a chance the first day, or may be obliged to wait a week or ten days

before one occurs ; the morning and the evening are the best time. Just before the breeding season, where you are certain of finding two together, it is not a bad plan, on finding out the roosting place, to endeavour to kill only the female, and not return again till after an interval of three days, when you will find that the cock has brought another female. I have known a keeper, by adopting this plan, kill seven female birds, and thus get rid of the whole breed in the vicinity for at least one season.

The Blue, or *Peregrine Falcons*, are equally destructive to game on the moors ; but they are not so common as the hen harrier. These birds build in the wildest parts of the mountains, in the highest and most inaccessible rocks, and can be shot in the breeding season, by awaiting their arrival at their nests in concealment. The hen bird is very handsome ; the back of the head and near it is of a darkish blue ; outside of the wings, lighter blue, and in the centre of the back and towards the points of the wings ; the under part of the neck white ; the breast buff, covered with darkish spots, the lower part with dark streaks. Its weight, from two pounds to two pounds and a half. Length between the extreme points of the wings, from 38 to 42 inches ; from the beak to the end of the tail, 17 inches. The legs and claws are amazingly strong and powerful ; the legs

yellow, the claws black ; the beak is short and strong, the upper part curved and pointed, longer than the lower part ; both are jagged and denticulated. At the root of the beak there is a yellow rim nearly half an inch in depth ; there is also a yellow rim or border round the eyes, which are large. In the event of a grouse being found recently killed by either falcon or hen harrier, a trap neatly set by the side of it, without disturbing the position of the grouse, is almost certain to succeed, as all hawks invariably return to the birds which they have killed, but they will not touch a dead bird which they have not killed themselves.

I must not omit to mention the *Merlin*, which, although a small hawk, is very mischievous, and does considerable damage amongst grouse and partridges ; and although it only weighs half a pound, will knock down a black cock. It is extremely active, and astonishingly quick in flight. Both the cock and female are handsome, but the cock is the handsomer of the two ; his head, back, and outside of the wings are of a darkish blue ; the throat white, with some brown and reddish feathers between the white of the throat and the blue of the head ; the breast is of a brownish red. The female is of a lighter blue on the head, back, and outside of the wings ; the breast buff coloured, streaked with brown ; the beak short, the upper one

curved and sharp ; the claws long and very sharp. Length from point of beak to end of tail, thirteen inches ; the tail, six inches. These birds build in the heather, and may be easily shot in the breeding season.

The *Kestrils* do but little damage to game, living chiefly on mice ; they also feed their young with them. They, however, sometimes take small birds ; and, should they encounter any young partridges or young pheasants, they may take them. These are easily shot in the breeding season. They build in the rocks.

The *Sparrow Hawk* is a very destructive bird, especially fatal to partridges and young pheasants. The female is larger, heavier, and of greater length than the cock bird. They are very sharp-sighted, quick in flight, and active in their movements ; they skim along the surface of the ground with amazing rapidity, pouncing upon their game almost as soon as found, and seldom miss their aim. They are rarely to be seen on the moors, but generally frequent inclosures. They build in low trees ; sometimes in a white or black thorn bush. The cock bird is about the same length as the merlin, but a little larger and heavier ; the hen bird is three or four inches longer, and much heavier.

I have seen but few kites in those parts of Scotland where I have resided. They sometimes

visit farmyards and carry off young chickens and ducks, with a degree of boldness not usually characteristic of them; but I should rather imagine, when they venture on these feats of audacity, they are urged by excessive hunger, in which extremity all hawks are very daring, as I have frequently witnessed, in the case of both the merlin and falcon. The former I have lately seen on two occasions pursuing a thrush or other small bird within a few yards of me, backwards and forwards, nothing daunted. I unfortunately had no gun with me; and in the month of August, when grouse shooting, a single grouse rose before me and a brother sportsman, and was immediately shot by the latter. The grouse had no sooner reached the ground, than a falcon descended on him with the rapidity of lightning, and was instantly shot by my friend's second barrel, his claws being firmly fixed in the grouse. There were three other persons present, and several dogs, so that there can be no question as to the boldness of the falcon. He was, however, only a one-year-old bird. Where he came from previous to this display of boldness and audacity none of our party could tell, as he was not seen until within a few yards of the grouse in the very act of pouncing upon it. He probably had been watching our operations within a short distance, and possibly within sight, although he had escaped our observation.

In addition to the above-mentioned hawks, *Hoodies*, Jays, and Magpies, merit some attention, but especially the first of the three, they being more destructive to game than the whole tribe of hawks and ground vermin together, and combine cunning with extreme audacity. They are like the rosten crows in appearance. In the spring of the year they are constantly in quest of eggs and young birds, and if allowed to remain on the ground would destroy the best-stocked manor. They are easily caught in traps ; but are sometimes so numerous as to defy complete removal in this way, although I have sometimes found that trapping a few of them frightens the remainder off the ground ; but as it is only for a few days, a more potent and infallible remedy must therefore be resorted to, and that is *poison*. This of course must be used with care, and cautiously ; but as two days will suffice to clear the ground, a person may be constantly in attendance during the operation, so as to prevent the possibility of accident.

A hare, rabbit, or any kind of game makes an excellent bait ; if you cannot get game, a cat will do equally well. With either hare, rabbit, or cat, separate the flesh from the skin, within a small distance of the backbone, leaving the body just sufficiently attached to the skin to keep it in its place ; then slice the body in every direction

with a sharp knife, and introduce into all the spaces portions of *nux vomica*, corrosive sublimate, and strychnine. Place this on the ground where the hooddies resort, having previously informed the farmers of your intention, in order that they may keep their dogs at home. So soon as one hoddy discovers the bait he will soon attract others, and their united noise will collect the whole flight; the bait will soon be torn to pieces and devoured. On the following day scarcely a live bird will be visible; many will be found dead on the spot, the others will have taken their departure not to return. The remnants of the bait may then be removed and buried deep in the earth, or burnt so as to be out of the reach of dogs.

Magpies and *Jays* may be easily caught at any time with a common steel trap; and ought to be disposed of before the breeding season commences, as they commit serious havoc among partridges and pheasants, by robbing their nests of eggs, which they are but too successful in finding. A common hen's egg is an excellent bait. This must be placed on the ground in the rear of the trap; but so surrounded by bushes, that the magpie cannot reach it without passing over the plate of the trap. The trap must be as carefully set and as well concealed as for other vermin. Independently of taking eggs, both jays and mag-

pies will destroy young partridges and pheasants; they therefore constantly merit a keeper's attention. These birds may also be easily poisoned.

In some parts of Scotland *Buzzards* abound—a very large, strong hawk. They are easily taken in traps. Hares, dead sheep, and not unfrequently young lambs, are their prey ; occasionally they take reptiles. I saw a viper, or slow-worm, extracted from one after being shot. It had, however, been decapitated previous to being swallowed ; the body of the reptile being entire in the bird's throat, with the exception of the head, that being the only poisonous part.

In the spring of the year buzzards may be seen hovering over any dead sheep or lamb on the hills : a few traps set immediately round the dead animals are sure to be successful ; at other times, a bird, or flesh of any kind, will be a good bait. These birds build in old trees, or in high rocks, where there are bushes ; sometimes in an old crow's nest. They have two or three eggs, larger than a hen's egg, spotted with reddish brown. If not found until the breeding season, they are then easily shot at the nest.

Some gentlemen disapprove of keepers carrying a gun at any season of the year, and think that all vermin can, and ought to be, killed by trapping. I cannot say I subscribe to this opinion ; on the contrary, I think that a keeper ought

never to be without his gun when going his rounds, especially during the spring and summer ; for, however assiduous and skilful he may be in trapping, it is impossible he can destroy all the flying vermin without the use of his gun ; and if he is constantly on his ground, as he ought to be, innumerable unexpected fair chances and opportunities will present themselves of destroying hawks and other birds of prey, which he could not otherwise have had.

I shall be happy to be informed how the hen harrier, falcon, and merlin are to be destroyed, without having recourse to the gun. The most expert trapper may take a few, but he cannot take all of them, and without his gun will lose many of the most favourable opportunities ; besides, it frequently happens that many of the above hawks are only visitors on your grounds, in quest of game, and roost and breed on the adjoining moors. It will therefore be necessary for the keeper to be on the alert, and avail himself of every opportunity and chance which may occur to prevent his ground being devastated by these daily visitors, either by watching their arrival, or by awaiting their return ; and this he can only do by having his gun constantly with him. If a keeper is not to be trusted with a gun, he is not fit to be on the ground.

I have known extensive grounds on which the

hen harrier never bred, constantly visited by them from the adjoining moors in quest of game: if they are successful—which they invariably are, if there be any amount of game—you are sure to receive a daily visit from them; and as they generally pursue the same line of country, they may be shot to a certainty by awaiting their arrival in concealment, and easily trapped if you can find the remains of any bird killed by them to place a trap by.

One writer on this subject, who is very adverse to keepers carrying guns, and thinks the practice ought on no account to be allowed, advises you to leave hawks unmolested till the young birds are fledged, and then to take them out of their nest, secure them within bushes on the ground near the nest, traps being set all round the bushes for the purpose of taking both the old birds. Admitting, for argument's sake, this plan to be completely successful, I cannot think the success would repay, or compensate for, the delay, as the number of grouse which would be destroyed on a good moor by a brace of hen harriers or falcons, between the time of the old birds sitting upon the eggs and the young birds being fledged, would be ruinous. Each falcon and each hen harrier would have at least one grouse or black game a day—two, if they could get them; and those who have seen these birds at work, will be more in-

clined to believe in their success than in their failure: besides, the evidences of their success are to be found in all directions on the moors where they have been allowed to remain unmolested, however short the time may have been. I am therefore decidedly of opinion, that the moment these birds are seen on your ground, the keepers ought to be unremitting in their efforts to destroy them, as each day's delay, at this season of the year, involves a most serious loss, not of single birds, but of coveys. Traps set for the falcon on the points of rocks near the nest, where they have been observed to have alighted, may sometimes be successful; but as the falcon builds in the highest and steepest rocks, where access to the nest and these resting-places is always most difficult, and sometimes impossible, the only certain alternative is the gun.

The hen bird may be shot by the keeper's lying in concealment near the nest, if he can find a good position; but, having once placed himself, he must on no account move until a certain chance presents itself, as, if once detected, he would have great difficulty in getting a second chance. Before the keeper conceals himself, it is a good plan (and one which I have adopted with immediate success) for two persons to accompany him to the spot, and, after having located him in concealment, to walk quietly off to a distance.

The hen bird, thinking the coast clear, will descend to her nest within a few minutes ; but as she will make many evolutions in the air above the nest, so as thoroughly to inspect the contiguous ground before she ventures to settle near the nest, the keeper must exercise every caution, and be prompt in availing himself of the first fair chance. If he succeed in killing the hen bird, and is not subsequently equally successful with the cock, the latter will most probably leave the ground, and will only return immediately in the event of his finding another female ; but should he fail in this respect, he may not be visible till the ensuing spring, when he will be accompanied by another hen bird.

As the hen harriers build on the ground, they may be either shot or trapped early in the breeding season ; but, as I have before insisted, the sooner the better, as each day's delay involves a serious loss of game, especially after the young hawks are hatched, and require food. I know an instance of seven young grouse, as I have mentioned elsewhere, being found in a hen harrier's nest, after the keeper had killed one of the old birds ; the young hawks were fledged at the time, as it happened to be late in the season when this nest was found.

My opinion as to the policy of killing the hen bird immediately you can do so, is confirmed by

each succeeding year's experience. I have recently killed four female hawks from the nest, one of them a falcon ; the four were either laying their eggs or sitting upon them, I could not tell which, as the places selected for their nests were altogether inaccessible, being in high, rugged, precipitous rocks. A fortnight has elapsed since my killing them, and I have been constantly on the hills in the immediate vicinity of the nests, but not one of the cock birds has since been visible ; from which fact I think it may be fairly inferred they have left the ground, not having found hen birds.

It is now in the beginning of the month of May : the cock birds may return again with female birds this season ; but they have rarely done so on any previous year of my experience, as far as I have been able to judge, after any long interval, till the following breeding season ; and as I have been constantly on the same ground both winter and summer during the last three years, it is possible I may not be mistaken. If this be the case, the argument in favour of the immediate destruction of the female will preponderate over that urged in behalf of leaving the nest unmolested till the young birds are fledged, with the chance of trapping both the old birds ; for, even admitting this method to be generally successful, I presume it is not invariably a certainty.

▲ ▲

But what *is* an infallible certainty connected with this plan, is a vast sacrifice of game, and at the most important season of the year, just when birds are breeding; so that the loss may be estimated, when hen-harriers and falcons are left to breed, not by single birds, but by coveys; and as the young birds would not be fledged for three weeks or a month from the time when the first opportunity of killing the hen bird at the nest might have presented itself, those only who are cognisant of the destructiveness of these hawks can form an accurate estimate of the extent of the loss during this interval.

LONDON
PRINTED BY SPOTTISWOODE AND CO.
NEW-STREET SQUARE

BOOKS ON SPORTING SUBJECTS, &c.

The Dead Shot, or Sportsman's Complete Guide;
A Treatise on the Use of the Gun, Dog-breaking, Pigeon-Shooting, &c. By MARKSMAN. Fcp. with Plates, 5s.

Colonel Hawker's Instructions to Young Sportsmen in all that relates to Guns and Shooting. Revised by the Author's SON. Square crown 8vo. with Illustrations, 18s.

Encyclopaedia of Rural Sports;

A Complete Account, Historical, Practical, and Descriptive, of Hunting, Shooting, Fishing, Racing, &c. By D. P. BLAINE. With above 600 Woodcuts (20 from Designs by JOHN LEECH). 8vo. 42s.

The Dog in Health and Disease.

By STONEHENG. With 70 Wood Engravings. Square crown 8vo. 15s.

The Greyhound in 1864;

Being the Second Edition of a Treatise on the Art of Breeding, Rearing, and Training Greyhounds. By STONEHENG. With numerous Portraits of Greyhounds, &c. on Wood, and a Frontispiece. Square crown 8vo. 21s.

The Cricket Field,

Or the History and the Science of the Game of Cricket. By JAMES PYCROFT, B.A. Trin. Coll. Oxon. Fourth Edition. Fcp. 5s.

The Cricket Tutor,

A Treatise exclusively Practical. By the same Author. 18mo. 1s.

Cricketana.

By the same Author. With Portraits on Wood of E. Grace, W. Lillywhite, T. Lockyer, H. H. Stephenson, Caffyn, Hayward, and Carpenter. Fcp. 5s.

Short Whist.

By MAJOR A. Sixteenth Edition, newly and completely revised; with an Essay on the Theory of the Modern Scientific Game by Professor P. and a new Frontispiece. Fcp. 8vo. 3s. 6d.

The Handbook of Dining;

Or, Corpulency and Leanness Scientifically Considered. By BRILLAT-SAVARIN, Author of 'Physiologie du Goût.' Translated by L. F. SIMPSON. Second Edition, revised, with two additional Chapters. Fcp. 3s. 6d.

Wine, The Vine, and The Cellar.

By THOMAS GEORGE SHAW. Second Edition, revised and enlarged; with a new Frontispiece representing the Vintage, and 81 other Illustrations. 8vo. 16s.

London: LONGMANS, GREEN, and CO. Paternoster Row.

YOUATT ON THE HORSE, EDITED BY GABRIEL.

Revised Edition, in 1 vol. 8vo. price 10s. 6d. cloth,

THE HORSE,

INCLUDING A TREATISE ON DRAUGHT.

By WILLIAM YOUATT.

With numerous Woodcut Illustrations, chiefly from Designs
by W. Harvey.

REVISED AND ENLARGED BY E. N. GABRIEL, M.R.C.S. C.V.S.
SECRETARY TO ROYAL COLLEGE OF VETERINARY SURGEONS.

YOUATT'S work, admitted to be the best and most complete practical treatise on the Horse, was originally produced under the superintendence of the Society for the Diffusion of Useful Knowledge, and subsequently published by Messrs. LONGMANS and Co., by assignment of C. KNIGHT. The edition now advertised was carefully and thoroughly revised by Mr. GABRIEL, and brought up to a level with the state of the veterinary art. Amongst numerous other additions, an account is given of Mr. RABET'S method of horse-breaking; also a new set of illustrations of the age of the horse as indicated by his teeth. Purchasers should order Messrs. LONGMAN'S and Co.'s edition of *Youatt on the Horse*, which, besides the above-mentioned improvements, includes also the Author's latest corrections, &c. added to the second edition.

'**T**HREE is a freshness and vigour in Mr. GABRIEL'S style which we feel certain will prove acceptable to those who read works on this subject: it is so different from the dry, technical contents of most veterinary works, that the reader is not only instructed and amused, but is impressed as he proceeds

with sentiments of admiration for one of the most useful of God's creatures. YOUATT'S work on the horse is one of those few books which can be read over and over again with delight and interest. To many persons who are owners of horses, it will prove an especial boon: for in its pages will be found much that is instructive and profitable. The treatise on draught will be especially interesting to farmers and contractors; who, by adopting the Author's advice, may effect a considerable saving in horse power. The illustrations rank among the best we have ever seen. There are comparatively few artists who can draw a life-like portrait of the horse—indeed we think it all but impossible for an artist to excel in this particular branch unless he has himself well studied the anatomy and natural history of this noble animal; but here we have the various breeds, as well as the portraits of very many of our most celebrated thorough-breds, rendered with a fidelity as striking as it is instructive and beautiful. The work we unhesitatingly pronounce one of the best and most comprehensive we have ever read on the subject of the horse.'

SPORTING LIFE.

YOUATT on the DOG, 8vo. Woodcuts, 6s. may also be had.

London: LONGMANS, GREEN, and CO. Paternoster Row.

[SEPTEMBER 1866.]

GENERAL LIST OF WORKS

PUBLISHED BY

MESSRS. LONGMANS, GREEN, AND CO.

PATERNOSTER ROW, LONDON.

Historical Works.

LORD MACAULAY'S WORKS. Complete and Uniform Library Edition. Edited by his Sister, Lady TREVELYAN. 8 vols. 8vo. with Portrait, price £5 5s. cloth, or £8 8s. bound in tree-calf by Rivière.

The HISTORY of ENGLAND from the Fall of Wolsey to the Death of Elizabeth. By JAMES ANTHONY FROUDE, M.A. late Fellow of Exeter College, Oxford.

VOLS. I. to IV. the Reign of Henry VIII. Third Edition, 54s.

VOLS. V. and VI. the Reigns of Edward VI. and Mary. Second Edition, 28s.

VOLS. VII. and VIII. the Reign of Elizabeth, VOLS. I. and II. Fourth Edition, 28s.

VOLS. IX. and X. the Reign of Elizabeth, VOLS. III. and IV.

[In October.

The HISTORY of ENGLAND from the Accession of James II. By Lord MACAULAY.

LIBRARY EDITION, 5 vols. 8vo. £4.

CABINET EDITION, 8 vols. post 8vo. 48s.

PEOPLE'S EDITION, 4 vols. crown 8vo. 16s.

REVOLUTIONS in ENGLISH HISTORY. By ROBERT VAUGHAN, D.D. 3 vols. 8vo. 45s.

VOL. I. Revolutions of Race, Second Edition, revised, 15s.

VOL. II. Revolutions in Religion, 15s.

VOL. III. Revolutions in Government, 15s.

An ESSAY on the HISTORY of the ENGLISH GOVERNMENT and Constitution, from the Reign of Henry VII. to the Present Time. By JOHN EARL RUSSELL. Fourth Edition, revised. Crown 8vo. 6s.

The HISTORY of ENGLAND during the Reign of George the Third. By the Right Hon. W. N. MASSEY. Cabinet Edition. 4 vols. post 8vo. 24s.

The CONSTITUTIONAL HISTORY of ENGLAND, since the Accession of George III. 1760—1860. By THOMAS ERSKINE MAY, C.B. Second Edition. 2 vols. 8vo. 33s.

CONSTITUTIONAL HISTORY of the BRITISH EMPIRE from the Accession of Charles I. to the Restoration. By G. BRODIE, Esq. Historiographer-Royal of Scotland. Second Edition. 3 vols. 8vo. 36s.

HISTORICAL STUDIES. I. On Some of the Precursors of the French Revolution; II. Studies from the History of the Seventeenth Century; III. Leisure Hours of a Tourist. By HERMAN MERIVALE, M.A. 8vo. price 12s. 6d.

LECTURES on the HISTORY of ENGLAND. By WILLIAM LONGMAN. VOL. I. from the earliest times to the Death of King Edward II. with 6 Maps, a coloured Plate, and 53. Woodcuts. 8vo. 15s.

HISTORY of CIVILISATION. By HENRY THOMAS BUCKLE. 2 vols. 8vo. £1 17s.

VOL. I. *England and France*, Fourth Edition, 21s.

VOL. II. *Spain and Scotland*, Second Edition, 16s.

DEMOCRACY in AMERICA. By ALEXIS DE TOCQUEVILLE. Translated by HENRY REEVE, with an Introductory Notice by the Translator. 2 vols. 8vo. 21s.

The SPANISH CONQUEST in AMERICA, and its Relation to the History of Slavery and to the Government of Colonies. By ARTHUR HELPS. 4 vols. 8vo. £3. VOLS. I. and II. 28s. VOLS. III. and IV. 16s. each.

HISTORY of the REFORMATION in EUROPE in the Time of Calvin. By J. H. MERLE D'AUBIGNÉ, D.D. VOLS. I. and II. 8vo. 28s. and VOL. III. 12s. VOL. IV. 16s.

LIBRARY HISTORY of FRANCE, in 5 vols. 8vo. By EYRE EVANS CROWE. VOL. I. 14s. VOL. II. 15s. VOL. III. 18s. VOL. IV. in October.

LECTURES on the HISTORY of FRANCE. By the late Sir JAMES STEPHEN, LLD. 2 vols. 8vo. 24s.

The HISTORY of GREECE. By C. THIRLWALL, D.D. Lord Bishop of St. David's. 8 vols. 8vo. £3; or in 8 vols. fcp. 28s.

The TALE of the GREAT PERSIAN WAR, from the Histories of Herodotus. By GEORGE W. COX, M.A. late Scholar of Trin. Coll. Oxon. Fcp. 7s. 6d.

GREEK HISTORY from Themistocles to Alexander, in a Series of Lives from Plutarch. Revised and arranged by A. H. CLOUGH. Fcp. with 44 Woodcuts, 6s.

CRITICAL HISTORY of the LANGUAGE and LITERATURE of Ancient Greece. By WILLIAM MURE, of Caldwell. 5 vols. 8vo. £23 9s.

HISTORY of the LITERATURE of ANCIENT GREECE. By Professor K. O. MÜLLER. Translated by the Right Hon. Sir GEORGE CORNWALL LEWIS, Bart. and by J. W. DONALDSON, D.D. 3 vols. 8vo. 36s. —

HISTORY of the CITY of ROME from its Foundation to the Sixteenth Century of the Christian Era. By THOMAS H. DYER, LLD. 8vo. with 2 Maps, 15s.

HISTORY of the ROMANS under the EMPIRE. By CHARLES MERIVALE, B.D. Chaplain to the Speaker. Cabinet Edition, with Maps complete in 8 vols. post 8vo. 48s.

The FALL of the ROMAN REPUBLIC: a Short History of the Last Century of the Commonwealth. By CHARLES MERIVALE, B.D. Chaplain to the Speaker. Fourth Edition. 12mo. 7s. 6d.

The CONVERSION of the ROMAN EMPIRE: the Boyle Lectures for the year 1864, delivered at the Chapel Royal, Whitehall. By CHARLES MERIVALE, B.D. Chaplain to the Speaker. Second Edition, 8vo. 8s. 6d.

The CONVERSION of the NORTHERN NATIONS; the Boyle Lectures for 1865. By the same Author. 8vo. 8s. 6d.

CRITICAL and HISTORICAL ESSAYS contributed to the *Edinburgh Review*. By the Right Hon. LORD MACAULAY.

LIBRARY EDITION, 3 vols. 8vo. 36s.

TRAVELLER'S EDITION, in 1 vol. 21s.

CABINET EDITION, 3 vols. fcp. 21s.

PEOPLE'S EDITION, 2 vols. crown 8vo. 8s.

HISTORICAL and PHILOSOPHICAL ESSAYS. By NASSAU W. SENIOR. 2 vols. post 8vo. 16s.

HISTORY of the RISE and INFLUENCE of the SPIRIT of RATIONALISM in EUROPE. By W. E. H. LECKY, M.A. Second Edition, revised. 2 vols. 8vo. 25s.

The HISTORY of PHILOSOPHY, from Thales to the Present Day. By GEORGE HENRY LEWES. Third Edition, partly rewritten and greatly enlarged. In 2 vols. VOL. I. *Ancient Philosophy*; VOL. II. *Modern Philosophy*. [Nearly ready.]

HISTORY of the INDUCTIVE SCIENCES. By WILLIAM WHEWELL, D.D. F.R.S. late Master of Trin. Coll. Cantab. Third Edition. 8 vols. crown 8vo. 24s.

HISTORY of SCIENTIFIC IDEAS; being the First Part of the Philosophy of the Inductive Sciences. By the same Author. 2 vols. cr. 8vo. 14s.

EGYPT'S PLACE in UNIVERSAL HISTORY; an Historical Investigation. By C. C. J. BUNSEN, D.D. Translated by C. H. CORTELL, M.A. With many Illustrations. 4 vols. 8vo. £5 8s. VOL. V. is nearly ready.

MAUNDER'S HISTORICAL TREASURY; comprising a General Introductory Outline of Universal History, and a series of Separate Histories. Fcp. 10s.

HISTORICAL and CHRONOLOGICAL ENCYCLOPÆDIA, presenting in a brief and convenient form Chronological Notices of all the Great Events of Universal History. By B. B. WOODWARD, F.S.A. Librarian to the Queen. [In the press.]

HISTORY of the CHRISTIAN CHURCH, from the Ascension of Christ to the Conversion of Constantine. By E. BURTON, D.D. late Prof. of Divinity in the Univ. of Oxford. Eighth Edition. Fcp. 3s. 6d.

SKETCH of the HISTORY of the CHURCH of ENGLAND to the Revolution of 1688. By the Right Rev. T. V. SHORT, D.D. Lord Bishop of St. Asaph. Seventh Edition. Crown 8vo. 10s. 6d.

HISTORY of the EARLY CHURCH, from the First Preaching of the Gospel to the Council of Nicaea, A.D. 325. By the Author of 'Amy Herbert.' Fcp. 4s. 6d.

The ENGLISH REFORMATION. By F. C. MASSINGBERD, M.A. Chancellor of Lincoln and Rector of South Ormsby. Fourth Edition, revised. Fcp. 8vo. 7s. 6d.

HISTORY of WESLEYAN METHODISM. By GEORGE SMITH, F.A.S. Fourth Edition, with numerous Portraits. 3 vols. cr. 8vo. 7s. each.

LECTURES on the HISTORY of MODERN MUSIC, delivered at the Royal Institution. By JOHN HULLAH. FIRST COURSE, with Chronological Tables, post 8vo. 6s. 6d. SECOND COURSE, on the Transition Period, with 40 Specimens, 8vo. 16s.

Biography and Memoirs.

EXTRACTS of the JOURNALS and CORRESPONDENCE of MISS BERRY, from the Year 1783 to 1852. Edited by Lady THERESA LIVINGSTON. Second Edition, with 3 Portraits. 3 vols. 8vo. 42s.

The DIARY of the Right Hon. WILLIAM WINDHAM, M.P. From 1783 to 1809. Edited by Mrs. HENRY BARING. 8vo. 18s.

LIFE of the DUKE of WELLINGTON. By the Rev. G. R. GLEIG, M.A. Popular Edition, carefully revised; with copious Additions. Crown 8vo. with Portrait, 5s.

Brialmont and Gleig's Life of the Duke of Wellington. (The Parent Work.) 4 vols. 8vo. with Illustrations, £2 14s.

Life of the Duke of Wellington, Intermediate Edition, partly from the French of M. BRIALMONT, partly from Original Documents. By the Rev. G. R. GLEIG, M.A. 8vo. with Portrait, 15s.

HISTORY of MY RELIGIOUS OPINIONS. By J. H. NEWMAN, D.D. Being the Substance of *Apologia pro Vita Sua*. Post 8vo. 6s.

FATHER MATHEW: a Biography. By JOHN FRANCIS MAGUIRE, M.P. Popular Edition, with Portrait. Crown 8vo. 3s. 6d.

Rome; its Rulers and its Institutions. By the same Author. New Edition in preparation.

LIFE of AMELIA WILHELMINA SIEVEKING, from the German. Edited, with the Author's sanction, by CATHERINE WINKWORTH. Post 8vo. with Portrait, 12s.

MOZART'S LETTERS (1769-1791), translated from the Collection of Dr. LUDWIG NOHL by Lady WALLACE. 2 vols. post 8vo. with Portrait and Facsimile, 18s.

BEETHOVEN'S LETTERS (1790-1826), from the Two Collections of Drs. NOHL and discovered Letters to the Archduke Rudolph, Cardinal-Archbishop of Olmütz, VON KÖCHEL. Translated by Lady WALLACE. 2 vols. post 8vo. with Portrait.

FELIX MENDELSSOHN'S LETTERS from *Italy and Switzerland* and *Letters from 1833 to 1847*, translated by Lady WALLACE. New Edition with Portrait. 2 vols. crown 8vo. 5s. each.

RECOLLECTIONS of the late **WILLIAM WILBERFORCE, M.P.**
for the County of York during nearly 30 Years. By J. S. HARFORD, F.R.S.
Second Edition. Post 8vo. 7s.

MEMOIRS of **SIR HENRY HAVELOCK, K.C.B.** By JOHN CLARK
MARSHMAN. Second Edition. 8vo. with Portrait, 12s. 6d.

THOMAS MOORE'S MEMOIRS, JOURNAL, and CORRESPONDENCE. Edited and abridged from the First Edition by EARL RUSSELL.
Square crown 8vo. with 8 Portraits, 12s. 6d.

MEMOIR of the Rev. **SYDNEY SMITH.** By his Daughter, Lady HOLLAND. With a Selection from his Letters, edited by Mrs. AUSTIN.
2 vols. 8vo. 28s.

VICISSITUDES of FAMILIES. By Sir **BERNARD BURKE**, Ulster King of Arms. FIRST, SECOND, and THIRD SERIES. 3 vols. crown 8vo.
12s. 6d. each.

ESSAYS in ECCLESIASTICAL BIOGRAPHY. By the Right Hon.
Sir J. STEPHEN, LL.D. Fourth Edition. 8vo. 14s.

BIOGRAPHIES of DISTINGUISHED SCIENTIFIC MEN. By FRANÇOIS ARAGO. Translated by Admiral W. H. SMYTH, F.R.S. the Rev.
B. POWELL, M.A. and R. GRANT, M.A. 8vo. 18s.

LAUNDER'S BIOGRAPHICAL TREASURY: Memoirs, Sketches, and Brief Notices of above 12,000 Eminent Persons of All Ages and Nations.
Edited by W. L. R. CATES. Fcp. 10s. 6d.

LETTERS and LIFE of FRANCIS BACON, including all his Occasional Works. Collected and edited, with a Commentary, by J. SPEDDING,
Trin. Coll. Cantab. VOLS. I. and II. 8vo. 24s.

Criticism, Philosophy, Polity, &c.

The INSTITUTES of JUSTINIAN; with English Introduction, Translation, and Notes. By T. C. SANDARS, M.A. Barrister, late Fellow of Oriel Coll. Oxon. Third Edition. 8vo. 15s.

The ETHICS of ARISTOTLE. Illustrated with Essays and Notes. By Sir A. GRANT, Bart. M.A. LL.D. Director of Public Instruction in the Bombay Presidency. Second Edition, revised and completed. 2 vols. 8vo.
28s.

ELEMENTS of LOGIC. By R. WHATELY, D.D. late Archbishop of Dublin. Ninth Edition. 8vo. 10s. 6d. crown 8vo. 4s. 6d.

Elements of Rhetoric. By the same Author. Seventh Edition. 8vo. 10s. 6d. crown 8vo. 4s. 6d.

English Synonymes. Edited by Archbishop WHATELY. 5th Edition. Fcp. 3s.

BACON'S ESSAYS with ANNOTATIONS. By R. WHATELY, D.D. late Archbishop of Dublin. Sixth Edition. 8vo. 10s. 6d.

LORD BACON'S WORKS, collected and edited by R. L. ELLIS, M.A. J. SPEDDING, M.A. and D. D. HEATH. Vols. I. to V. *Philosophical Works* 5 vols. 8vo. £4 6s. Vols. VI. and VII. *Literary and Professional Works* 2 vols. £1 16s.

On **REPRESENTATIVE GOVERNMENT**. By JOHN STUART MILL M.P. for Westminster. Third Edition, 8vo. 9s. crown 8vo. 2s.

On **Liberty**. By the same Author. Third Edition. Post 8vo. 7s. 6d. crown 8vo. 1s. 4d.

Principles of Political Economy. By the same. Sixth Edition 2 vols. 8vo. 30s. or in 1 vol. crown 8vo. 5s.

A System of Logic, Ratiocinative and Inductive. By the same. Sixth Edition. Two vols. 8vo. 25s.

Utilitarianism. By the same. Second Edition. 8vo. 5s.

Dissertations and Discussions. By the same Author. 2 vols. 8vo. price 24s.

Examination of Sir W. Hamilton's Philosophy, and of the Principal Philosophical Questions discussed in his Writings. By the same Author. Second Edition. 8vo. 14s.

MISCELLANEOUS REMAINS from the Common-place Book of RICHARD WHATELY, D.D. late Archbishop of Dublin. Edited by Miss E. L. WHATELY. Crown 8vo. 7s. 6d.

ESSAYS on the ADMINISTRATIONS of GREAT BRITAIN from 1783 to 1830. By the Right Hon. Sir G. C. LEWIS, Bart. Edited by the Right Hon. Sir E. HEAD, Bart. 8vo. with Portrait, 15s.

By the same Author.

Inquiry into the Credibility of the Early Roman History, 2 vols. price 30s.

On the Methods of Observation and Reasoning in Politics, 2 vols. price 28s.

Irish Disturbances and Irish Church Question, 12s.

Remarks on the Use and Abuse of some Political Terms, 9s.

The Fables of Babrius, Greek Text with Latin Notes, PART I 5s. 6d. PART II. 8s. 6d.

An OUTLINE of the NECESSARY LAWS of THOUGHT: a Treatise on Pure and Applied Logic. By the Most Rev. W. THOMSON, D.D. Archibishop of York. Crown 8vo. 5s. 6d.

The ELEMENTS of LOGIC. By THOMAS SHEDDEN, M.A. of St. Peter's Coll. Cantab. 12mo. 4s. 6d.

ANALYSIS of Mr. MILL'S SYSTEM of LOGIC. By W. STEBBINS, M.A. Fellow of Worcester College, Oxford. Second Edition. 12mo. 3s. 6d

The ELECTION of REPRESENTATIVES, Parliamentary and Municipal; a Treatise. By THOMAS HARE, Barrister-at-Law. Third Edition with Additions. Crown 8vo. 6s.

SPEECHES of the **RIGHT HON. LORD MACAULAY**, corrected by Himself. Library Edition, 8vo. 12s. People's Edition, crown 8vo. 3s. 6d.

LORD MACAULAY'S SPEECHES on **PARLIAMENTARY REFORM** in 1831 and 1832. 16mo. 1s.

A DICTIONARY of the ENGLISH LANGUAGE. By R. G. LATHAM, M.A. M.D. F.R.S. Founded on the Dictionary of Dr. S. JOHNSON, as edited by the Rev. H. J. TODD, with numerous Emendations and Additions. Publishing in 36 Parts, price 3s. 6d. each, to form 2 vols. 4to.

THESAURUS of ENGLISH WORDS and PHRASES, classified and arranged so as to facilitate the Expression of Ideas, and assist in Literary Composition. By P. M. ROGET, M.D. 18th Edition. Crown 8vo. 10s. 6d.

LECTURES on the **SCIENCE of LANGUAGE**, delivered at the Royal Institution. By MAX MÜLLER, M.A. Taylorian Professor in the University of Oxford. **FIRST SERIES**, Fourth Edition, 12s. **SECOND SERIES**, 18s.

CHAPTERS on LANGUAGE. By FREDERIC W. FARRAR, M.A. late Fellow of Trin. Coll. Cambridge, Author of 'The Origin of Language,' &c. Crown 8vo. 8s. 6d.

The DEBATER; a Series of Complete Debates, Outlines of Debates, and Questions for Discussion. By F. ROWTON. Fcp. 6s.

A COURSE of ENGLISH READING, adapted to every taste and capacity; or, How and What to Read. By the Rev. J. PYCROFT, B.A. Fourth Edition. Fcp. 5s.

MANUAL of ENGLISH LITERATURE, Historical and Critical: with a Chapter on English Metres. By THOMAS ARNOLD, M.A. Post 8vo. New Edition, revised. [In November.

SOUTHEY'S DOCTOR, complete in One Volume. Edited by the Rev. J. W. WALTER, B.D. Square crown 8vo. 12s. 6d.

HISTORICAL and CRITICAL COMMENTARY on the **OLD TESTAMENT**; with a New Translation. By M. M. KALISCH, Ph.D. VOL. I. *Genesis*, 8vo. 18s. or adapted for the General Reader, 12s. VOL. II. *Exodus*, 15s. or adapted for the General Reader, 12s.

A Hebrew Grammar, with Exercises. By the same. **PART I. Outlines with Exercises**, 8vo. 12s. 6d. **KEY**, 5s. **PART II. Exceptional Forms and Constructions**, 12s. 6d.

A LATIN-ENGLISH DICTIONARY. By J. T. WHITE, M.A. of Corpus Christi College, and J. E. RIDDLE, M.A. of St. Edmund Hall, Oxford. Imperial 8vo. pp. 2,128, price 42s. cloth.

A New Latin-English Dictionary, abridged from the larger work of *White* and *Riddle* (as above), by J. T. WHITE, M.A. Joint-Author. Medium 8vo. pp. 1,048, price 18s. cloth.

The Junior Scholar's Latin-English Dictionary, abridged from the larger works of *White* and *Riddle* (as above), by J. T. White, M.A. surviving Joint-Author. Square 12mo. pp. 662, price 7s. 6d. cloth.

An ENGLISH-GREEK LEXICON, containing all the Greek Words used by Writers of good authority. By C. D. YONGE, B.A. Fifth Edition. 4to. 21s.

Mr. YONGE'S NEW LEXICON, English and Greek, abridged from his larger work (as above). Revised Edition. Square 12mo. 8s. 6d.

A GREEK-ENGLISH LEXICON. Compiled by H. G. LIDDELL, D.D. Dean of Christ Church, and R. SCOTT, D.D. Master of Balliol. Fifth Edition. Crown 4to. 31s. 6d.

A Lexicon, Greek and English, abridged from LIDDELL and SCOTT's *Greek-English Lexicon*. Eleventh Edition. Square 12mo. 7s. 6d.

A SANSKRIT-ENGLISH DICTIONARY, the Sanskrit words printed both in the original Devanagari and in Roman letters; with References to the Best Editions of Sanskrit Authors, and with Etymologies and Comparisons of Cognate Words chiefly in Greek, Latin, Gothic, and Anglo-Saxon. Compiled by T. BENFEY, Prof. in the Univ. of Göttingen. 8vo. 52s. 6d.

A PRACTICAL DICTIONARY of the FRENCH and ENGLISH LANGUAGES. By L. CONTANSEAU. Eleventh Edition. Post 8vo. 10s. 6d.

Contanseau's Pocket Dictionary, French and English, abridged from the above by the Author. New and Cheaper Edition, 18mo. 3s. 6d.

NEW PRACTICAL DICTIONARY of the GERMAN LANGUAGE; German-English and English-German. By the Rev. W. L. BLACKLEY, M.A. and Dr. CARL MARTIN FRIEDLANDER. Post 8vo. 14s.

Miscellaneous Works and Popular Metaphysics.

RECREATIONS of a COUNTRY PARSON. By A. K. H. B. FIRST SERIES, with 41 Woodcut Illustrations from Designs by R. T. Pritchett. Crown 8vo. 12s. 6d.

Recreations of a Country Parson. SECOND SERIES. Cr. 8vo. 3s. 6d.

The Common-place Philosopher in Town and Country. By the same Author. Crown 8vo. 3s. 6d.

Leisure Hours in Town; Essays Consolatory, Aesthetic, Moral, Social, and Domestic. By the same Author. Crown 8vo. 3s. 6d.

The Autumn Holidays of a Country Parson; Essays contributed to *Fraser's Magazine* and to *Good Words*. By the same. Crown 8vo. 3s. 6d.

The Graver Thoughts of a Country Parson. SECOND SERIES. By the same Author. Crown 8vo. 3s. 6d.

Critical Essays of a Country Parson. Selected from Essays contributed to *Fraser's Magazine*. By the same Author. Post 8vo. 9s.

Sunday Afternoons at the Parish Church of a University City. By the same Author. [In October.

A CAMPAGNER AT HOME. By SHIRLEY, Author of 'Thalatta' and 'Nugae Criticæ.' Post 8vo. with Vignette, 7s. 6d.

TUDIES in PARLIAMENT. A Series of Sketches of Leading Politicians. By R. H. HUTTON. [Reprinted from the 'Pall Mall Gazette.'] Crown 8vo. 4s. 6d.

ORD MACAULAY'S MISCELLANEOUS WRITINGS.

LIBRARY EDITION. 2 vols. 8vo. Portrait, 21s.

PEOPLE'S EDITION. 1 vol. crown 8vo. 4s. 6d.

The REV. SYDNEY SMITH'S MISCELLANEOUS WORKS; including his Contributions to the *Edinburgh Review*.

LIBRARY EDITION, 3 vols. 8vo. 36s.

TRAVELLER'S EDITION, in 1 vol. 21s.

CABINET EDITION, 3 vols. fcp. 21s.

PEOPLE'S EDITION, 2 vols. crown 8vo. 8s.

Elementary Sketches of Moral Philosophy, delivered at the Royal Institution. By the same Author. Fcp. 7s.

The Wit and Wisdom of the Rev. Sydney Smith: a Selection of the most memorable Passages in his Writings and Conversations. 16mo. 5s.

EPIGRAMS, Ancient and Modern ; Humorous, Witty, Satirical, Moral, and Panegyrical. Edited by Rev. JOHN BOOTH, B.A. Cambridge. Second Edition, revised and enlarged. Fcp. 7s. 6d.

From MATTER to SPIRIT: the Result of Ten Years' Experience in Spirit Manifestations. By SOPHIA E. DE MORGAN. With a PREFACE by Professor DE MORGAN. Post 8vo. 8s. 6d.

ESSAYS selected from CONTRIBUTIONS to the Edinburgh Review. By HENRY ROGERS. Second Edition. 3 vols. fcp. 21s.

The Eclipse of Faith; or, a Visit to a Religious Sceptic. By the same Author. Eleventh Edition. Fcp. 5s.

Defence of the Eclipse of Faith, by its Author ; a rejoinder to Dr. Newman's *Reply*. Third Edition. Fcp. 3s. 6d.

Selections from the Correspondence of R. E. H. Greyson. By the same Author. Third Edition. Crown 8vo. 7s. 6d.

Fulleriana, or the Wisdom and Wit of THOMAS FULLER, with Essay on his Life and Genius. By the same Author. 16mo. 2s. 6d.

An ESSAY on HUMAN NATURE; showing the Necessity of a Divine Revelation for the Perfect Development of Man's Capacities. By HENRY S. BOASE, M.D. F.R.S. and G.S. 8vo. 12s.

The PHILOSOPHY of NATURE; a Systematic Treatise on the Causes and Laws of Natural Phænomena. By the same Author. 8vo. 12s.

In INTRODUCTION to MENTAL PHILOSOPHY, on the Inductive Method. By J. D. MORELL, M.A. LL.D. 8vo. 12s.

Elements of Psychology, containing the Analysis of the Intellectual Powers. By the same Author. Post 8vo. 7s. 6d.

The SECRET of HEGEL: being the Hegelian System in Origin, Principle, Form, and Matter. By JAMES HUTCHISON STIRLING. 2 vols. 8vo. 28s.

SIGHT and TOUCH: an Attempt to Disprove the Received (or Berkeleyan) Theory of Vision. By THOMAS K. ABBOTT, M.A. Fellow and Tutor of Trin. Coll. Dublin. 8vo. with 21 Woodcuts. 5s. 6d.

The SENSES and the INTELLECT. By ALEXANDER BAIN, M.A. Professor of Logic in the University of Aberdeen. Second Edition. 8vo. price 15s.

The Emotions and the Will, by the same Author; completing the Systematic Exposition of the Human Mind. 8vo. 15s.

On the Study of Character, including an Estimate of Phrenology. By the same Author. 8vo. 9s.

TIME and SPACE: a Metaphysical Essay. By SHADWORTH H. HODGSON. 8vo. pp. 588, price 16s.

The WAY to REST: Results from a Life-search after Religious Truth. By R. VAUGHAN, D.D. Crown 8vo. 7s. 6d.

HOURS WITH THE MYSTICS: a Contribution to the History of Religious Opinion. By ROBERT ALFRED VAUGHAN, B.A. Second Edition. 2 vols. crown 8vo. 12s.

The PHILOSOPHY of NECESSITY; or Natural Law as applicable to Mental, Moral, and Social Science. By CHARLES BRAY. Second Edition. 8vo. 9s.

The Education of the Feelings and Affections. By the same Author. Third Edition. 8vo. 3s. 6d.

On Force, its Mental and Moral Correlates. By the same Author. 8vo. 5s.

CHRISTIANITY and COMMON SENSE. By Sir WILLOUGHBY JONES, Bart. M.A. Trin. Coll. Cantab. 8vo. 6s.

Astronomy, Meteorology, Popular Geography, &c.

OUTLINES of ASTRONOMY. By Sir J. F. W. HERSCHEL, Bart. M.A. Eighth Edition, revised; with Plates and Woodcuts. 8vo. 18s.

ARAGO'S POPULAR ASTRONOMY. Translated by Admiral W. H. SMYTH, F.R.S. and R. GRANT, M.A. With 25 Plates and 358 Woodcuts. 2 vols. 8vo. £2 5s.

SATURN and its SYSTEM. By RICHARD A. PROCTOR, B.A. late Scholar of St John's Coll. Camb. and King's Coll. London. 8vo. with 14 Plates, 14s.

The Handbook of the Stars. By the same Author. 3 Maps. Square fcp. 5s.

CELESTIAL OBJECTS for COMMON TELESCOPES. By the Rev. T. W. WEBB, M.A. F.R.A.S. With Map of the Moon, and Woodcuts. 16mo. 7s.

SPHYICAL GEOGRAPHY for SCHOOLS and GENERAL READERS. By M. F. MAUVEY, LL.D. Fcp. with 2 Charts, 2s. 6d.

McCULLOCH'S DICTIONARY, Geographical, Statistical, and Historical, of the various Countries, Places, and Principal Natural Objects in the World. Revised Edit. printed in a larger type, with Maps, and with the Statistical Information throughout brought up to the latest returns by F. MARTIN. 4 vols. 8vo. 21s. each. Vols. I. and II. now ready.

1 GENERAL DICTIONARY of GEOGRAPHY, Descriptive, Physical, Statistical, and Historical: forming a complete Gazetteer of the World. By A. KEITH JOHNSTON, F.R.S.E. 8vo. 31s. 6d.

1 MANUAL of GEOGRAPHY, Physical, Industrial, and Political. By W. HUGHES, F.R.G.S. Professor of Geography in King's College, and in Queen's College, London. With 6 Maps. Fcp. 7s. 6d.

The Geography of British History; a Geographical Description of the British Islands at Successive Periods. By the same. With 6 Maps. Fcp. 8s. 6d.

Abridged Text-Book of British Geography. By the same. Fcp. 1s. 6d.

MAUNDER'S TREASURY of GEOGRAPHY, Physical, Historical, Descriptive, and Political. Edited by W. HUGHES, F.R.G.S. With 7 Maps and 16 Plates. Fcp. 10s. 6d.

Natural History and Popular Science.

THE ELEMENTS of PHYSICS or NATURAL PHILOSOPHY. By NEIL ARNOTT, M.D. F.R.S. Physician Extraordinary to the Queen. Sixth Edition, rewritten and completed. 2 Parts, 8vo. 21s.

HEAT CONSIDERED as a MODE of MOTION. By Professor JOHN TYNDALL, LL.D. F.R.S. Second Edition. Crown 8vo. with Woodeuts, 12s. 6d.

VOLCANOS, the Character of their Phenomena, their Share in the Structure and Composition of the Surface of the Globe, &c. By G. POULETT SCROPE, M.P. F.R.S. Second Edition. 8vo. with Illustrations, 15s.

1 TREATISE on ELECTRICITY, in Theory and Practice. By A. DE LA RIVE, Prof. in the Academy of Geneva. Translated by C. V. WALKER, F.R.S. 3 vols. 8vo. with Woodcuts, £23 13s.

THE CORRELATION of PHYSICAL FORCES. By W. R. GROVE, Q.C. V.P.R.S. Fourth Edition. 8vo. 7s. 6d.

MANUAL of GEOLOGY. By S. HAUGHTON, M.D. F.R.S. Fellow of Trin. Coll. and Prof. of Geol. in the Univ. of Dublin. Revised Edition, with 66 Woodcuts. Fcp. 6s.

1 GUIDE to GEOLOGY. By J. PHILLIPS, M.A. Professor of Geology in the University of Oxford. Fifth Edition, with Plates. Fcp. 4s.

1 GLOSSARY of MINERALOGY. By H. W. BRISTOW, F.G.S. of the Geological Survey of Great Britain. With 486 Figures. Crown 8vo. 12s.

PHILLIPS'S ELEMENTARY INTRODUCTION to MINERALOGY, with extensive Alterations and Additions, by H. J. BROOKE, F.R.S. and W. H. MILLER, F.G.S. Post 8vo. with Woodcuts, 18s.

VAN DER HOEVEN'S HANDBOOK of ZOOLOGY. Translated from the Second Dutch Edition by the Rev. W. CLARK, M.D. F.R.S. 2 vols. 8vo. with 24 Plates of Figures, 60s.

The COMPARATIVE ANATOMY and PHYSIOLOGY of the VERTEBRATE Animals. By RICHARD OWEN, F.R.S. D.C.L. 3 vols. 8vo. with upwards of 1,200 Woodcuts. VOLS. I. and II. price 21s. each, now ready.

HOMES WITHOUT HANDS: a Description of the Habitations of Animals, classed according to their Principle of Construction. By Rev. L. G. WOOD, M.A. F.L.S. With about 140 Vignettes on Wood (20 full size of page). Second Edition. 8vo. 21s.

MANUAL of CORALS and SEA JELLIES. By J. R. GREENE, B.A. Edited by the Rev. J. A. GALBRAITH, M.A. and the Rev. S. HAUGHTON, M.D. Fcp. with 39 Woodcuts, 5s.

Manual of Sponges and Animalculæ; with a General Introduction on the Principles of Zoology. By the same Author and Editors. Fcp. with 16 Woodcuts, 2s.

Manual of the Metalloids. By J. APJOHN, M.D. F.R.S. and the same Editors. Revised Edition. Fcp. with 38 Woodcuts, 7s. 6d.

The HARMONIES of NATURE and UNITY of CREATION. By Dr. GEORGE HAETWIG. 8vo. with numerous Illustrations, 18s.

The Sea and its Living Wonders. By the same Author. Second (English) Edition. 8vo. with many Illustrations. 18s.

The Tropical World. By the same Author. With 8 Chromoxylographs and 172 Woodcuts. 8vo. 21s.

SKETCHES of the NATURAL HISTORY of CEYLON. By Sir J. EMERSON TENNENT, K.C.S. LL.D. With 82 Wood Engravings. Post 8vo. price 12s. 6d.

Ceylon. By the same Author. Fifth Edition; with Maps, &c. and 90 Wood Engravings. 2 vols. 8vo. £2 10s.

The Wild Elephant, its Structure and Habits, with the Method of Taking and Training it in Ceylon. By the same Author. With Illustrations. In 1 vol. [Nearly ready.]

A FAMILIAR HISTORY of BIRDS. By E. STANLEY, D.D. F.R.S. late Lord Bishop of Norwich. Seventh Edition, with Woodcuts. Fcp. 3s. 6d.

MARVELS and MYSTERIES of INSTINCT; or, Curiosities of Animal Life. By G. GARRATT. Third Edition. Fcp. 7s.

HOME WALKS and HOLIDAY RAMBLES. By the Rev. C. A. JOHNS, B.A. F.L.S. Fcp. 8vo. with 10 Illustrations, 6s.

KIRBY and SPENCE'S INTRODUCTION to ENTOMOLOGY, or Elements of the Natural History of Insects. Seventh Edition. Crown 8vo. price 5s.

MAUNDER'S TREASURY of NATURAL HISTORY, or Popular Dictionary of Zoology. Revised and corrected by T. S. COBBOLD, M.D. Fcp. with 900 Woodcuts, 10s.

The TREASURY of BOTANY, or Popular Dictionary of the Vegetable Kingdom; with which is incorporated a Glossary of Botanical Terms. Edited by J. LINDLEY, F.R.S. and T. MOORE, F.L.S. assisted by eminent Contributors. Pp. 1,274, with 274 Woodcuts and 20 Steel Plates. 2 Parts. fcp. 20s.

The ELEMENTS of BOTANY for FAMILIES and SCHOOLS.
Tenth Edition, revised by THOMAS MOORE, F.L.S. Fcp. with 154 Wood-cuts, 2s. 6d.

The ROSE AMATEUR'S GUIDE. By THOMAS RIVERS. New Edition. Fcp. 4s.

The BRITISH FLORA; comprising the Phænogamous or Flowering Plants and the Ferns. By Sir W. J. HOOKER, K.H. and G. A. WALKER-ARNOTT, LL.D. 12mo. with 12 Plates, 14s. or coloured, 21s.

BRYOLOGIA BRITANNICA; containing the Mosses of Great Britain and Ireland, arranged and described. By W. WILSON. 8vo. with 61 Plates 42s. or coloured, £4 4s.

The INDOOR GARDENER. By Miss MALING. Fcp. with Frontispiece, printed in Colours, 5s.

LOUDON'S ENCYCLOPÆDIA of PLANTS; comprising the Specific Character, Description, Culture, History, &c. of all the Plants found in Great Britain. With upwards of 12,000 Woodcuts. 8vo. £3 13s. 6d.

Loudon's Encyclopædia of Trees and Shrubs; containing the Hardy Trees and Shrubs of Great Britain scientifically and popularly described. With 2,000 Woodcuts. 8vo. 50s.

MAUNDER'S SCIENTIFIC and LITERARY TREASURY; a Popular Encyclopædia of Science, Literature, and Art. Fcp. New Edition. [Nearly ready.

A DICTIONARY of SCIENCE, LITERATURE, and ART. Fourth Edition, re-edited by W. T. BRANDE (the Author), and GEORGE W. COX, M.A. assisted by gentlemen of eminent Scientific and Literary Acquirements. 3 vols. medium 8vo. price 63s. cloth.

ESSAYS on SCIENTIFIC and other SUBJECTS, contributed to Reviews. By Sir H. HOLLAND, Bart. M.D. Second Edition. 8vo. 14s.

ESSAYS from the EDINBURGH and QUARTERLY REVIEWS; with Addresses and other Pieces. By Sir J. F. W. HERSCHEL, Bart. M.A. 8vo. 18s.

Chemistry, Medicine, Surgery, and the Allied Sciences.

A DICTIONARY of CHEMISTRY and the Allied Branches of other Sciences; founded on that of the late Dr. URE. By HENRY WATTS, F.C.S. assisted by eminent Contributors. 5 vols. medium 8vo. in course of publication in Parts. VOL. I. 31s. 6d. VOL. II. 28s. VOL. III. 31s. 6d. VOL. IV. 24s. are now ready.

HANDBOOK of CHEMICAL ANALYSIS. Adapted to the Unitary System of Notation. By F. T. CONINGTON, M.A. F.C.S. Post 8vo. 7s. 6d.—
TABLES of QUALITATIVE ANALYSIS adapted to the same, 2s. 6d.

A HANDBOOK of VOLUMETRICAL ANALYSIS. By ROBERT H. SCOTT, M.A. T.C.D. Post 8vo. 4s. 6d.

ELEMENTS of CHEMISTRY, Theoretical and Practical. By **WILLIAM A. MILLER, M.D. LL.D. F.R.S. F.G.S.** Professor of Chemistry, King's College, London. 3 vols. 8vo. £2 13s. **PART I. CHEMICAL PHYSICS.** Third Edition, 12s. **PART II. INORGANIC CHEMISTRY,** 21s. **PART III. ORGANIC CHEMISTRY,** Second Edition, 20s.

A MANUAL of CHEMISTRY, Descriptive and Theoretical. By **WILLIAM ODLING, M.B. F.R.S.** **PART I.** 8vo. 9s.

A Course of Practical Chemistry, for the use of Medical Students. By the same Author. Second Edition, with 70 new Woodcuts. Crown 8vo. price 7s. 6d.

Lectures on Animal Chemistry, delivered at the Royal College of Physicians in 1865. By the same Author. Crown 8vo. 4s. 6d.

The DIAGNOSIS and TREATMENT of the DISEASES of WOMEN; including the Diagnosis of Pregnancy. By **GRAILY HEWITT, M.D.** 8vo. 16s.

LECTURES on the DISEASES of INFANCY and CHILDHOOD. By **CHARLES WEST, M.D. &c.** Fifth Edition, revised and enlarged. 8vo. 16s.

EXPOSITION of the SIGNS and SYMPTOMS of PREGNANCY: with other Papers on subjects connected with Midwifery. By **W. F. MONTGOMERY, M.A. M.D. M.R.I.A.** 8vo. with Illustrations, 25s.

A SYSTEM of SURGERY, Theoretical and Practical. In Treatises by Various Authors. Edited by **T. HOLMES, M.A. Cantab. Assistant-Surgeon to St. George's Hospital.** 4 vols. 8vo. £4 13s.

Vol. I. General Pathology. 21s.

Vol. II. Local Injuries: Gunshot Wounds, Injuries of the Head, Back, Face, Neck, Chest, Abdomen, Pelvis, of the Upper and Lower Extremities, and Diseases of the Eye. 21s.

Vol. III. Operative Surgery Diseases of the Organs of Circulation, Locomotion, &c. 21s.

Vol. IV. Diseases of the Organs of Digestion, of the Genito-Urinary System, and of the Breast, Thyroid Gland, and Skin; with APPENDIX and GENERAL INDEX. 30s.

LECTURES on the PRINCIPLES and PRACTICE of PHYSIC. By **THOMAS WATSON, M.D.** Physician-Extraordinary to the Queen. Fourth Edition. 2 vols. 8vo. 34s.

LECTURES on SURGICAL PATHOLOGY. By **J. PAGET, F.R.S.** Surgeon-Extraordinary to the Queen. Edited by **W. TURNER, M.B.** 8vo. with 117 Woodcuts, 21s.

A TREATISE on the CONTINUED FEVERS of GREAT BRITAIN. By **C. MURCHISON, M.D.** Senior Physician to the London Fever Hospital. 8vo. with coloured Plates, 18s.

ANATOMY, DESCRIPTIVE and SURGICAL. By **HENRY GRAY, F.R.S.** With 410 Wood Engravings from Dissections. Third Edition, by **T. HOLMES, M.A. Cantab.** Royal 8vo. 28s.

The CYCLOPÆDIA of ANATOMY and PHYSIOLOGY. Edited by the late **R. B. TODD, M.D. F.R.S.** Assisted by nearly all the most eminent cultivators of Physiological Science of the present age. 5 vols. 8vo. with 2,853 Woodcuts, £6 6s.

PHYSIOLOGICAL ANATOMY and PHYSIOLOGY of MAN. By the late R. B. TODD, M.D., F.R.S. and W. BOWMAN, F.R.S. of King's College. With numerous Illustrations. VOL. II. 8vo. 25s.

A DICTIONARY of PRACTICAL MEDICINE. By J. COPLAND, M.D. F.R.S. Abridged from the larger work by the Author, assisted by J. C. COPLAND, M.R.C.S. and throughout brought down to the present State of Medical Science. Pp. 1,560 in 8vo. price 26s.

Dr. Copland's Dictionary of Practical Medicine (the larger work). 3 vols. 8vo. £5 11s.

The WORKS of SIR B. C. BRODIE, Bart. collected and arranged by CHARLES HAWKINS, F.R.C.S.E. 3 vols. 8vo. with Medallion and Facsimile, 48s.

Autobiography of Sir B. C. Brodie, Bart. Printed from the Author's materials left in MS. Second Edition. Fcp. 4s. 6d.

The TOXICOLOGIST'S GUIDE: a New Manual on Poisons, giving the Best Methods to be pursued for the Detection of Poisons (post-mortem or otherwise). By JOHN HORSLEY, F.C.S. Analytical Chemist. Post 8vo. 3s. 6d.

A MANUAL of MATERIA MEDICA and THERAPEUTICS, abridged from Dr. PEREIRA'S *Elements* by F. J. FARRE, M.D. assisted by R. BENTLEY, M.R.C.S. and by R. WARINGTON, F.R.S. 8vo. with 90 Woodcuts, 21s.

Dr. Pereira's Elements of Materia Medica and Therapeutics. Third Edition. By A. S. TAYLOR, M.D. and G. O. REES, M.D. 3 vols. 8vo. with Woodcuts, £3 15s.

THOMSON'S CONSPECTUS of the BRITISH PHARMACOPEIA. Twenty-fourth Edition, corrected and made conformable throughout to the New Pharmacopœia of the General Council of Medical Education. By E. LLOYD BIRKETT, M.D. 18mo. 5s. 6d.

MANUAL of the DOMESTIC PRACTICE of MEDICINE. By W. B. KESTEVEN, F.R.C.S.E. Second Edition, revised, with Additions. Fcp. 5s.

The RESTORATION of HEALTH; or, the Application of the Laws of Hygiene to the Recovery of Health: a Manual for the Invalid, and a Guide in the Sick Room. By W. STRANGE, M.D. Fcp. 6s.

SEA-AIR and SEA-BATHING for CHILDREN and INVALIDS. By the same Author. Fcp. boards, 3s.

MANUAL for the CLASSIFICATION, TRAINING, and EDUCATION of the Feeble-Minded, Imbecile, and Idiotic. By P. MARTIN DUNCAN, M.B. and WILLIAM MILLARD. Crown 8vo. 5s.

The Fine Arts, and Illustrated Editions.

The NEW TESTAMENT, illustrated with Wood Engravings after the Early Masters, chiefly of the Italian School. Crown 4to. 63s. cloth, gilt top; or 25 5s. elegantly bound in morocco.

LYRA GERMANICA; Hymns for the Sundays and Chief Festivals of the Christian Year. Translated by CATHERINE WINKWORTH; 325 Illustrations on Wood drawn by J. LEIGHTON, F.S.A. Fcp. 4to. 21s.

The **LIFE of MAN SYMBOLISED** by the **MONTHS** of the **YEAR** in their Seasons and Phases; with Passages selected from Ancient and Modern Authors. By RICHARD PIGOT. Accompanied by a Series of 25 full-page Illustrations and numerous Marginal Devices, Decorative Initial Letters, and Tailpieces, engraved on Wood from Original Designs by JOHN LEIGHTON, F.S.A. 4to. 42s.

CAT'S and FARLIE'S MORAL EMBLEMS; with Aphorisms, Adages, and Proverbs of all Nations: comprising 121 Illustrations on Wood by J. LEIGHTON, F.S.A. with an appropriate Text by R. PIGOT. Imperial 8vo. 31s. 3d.

SHAKSPEARE'S SENTIMENTS and SIMILES, printed in Black and Gold, and Illuminated in the Missal Style by HENRY NOEL HUMPHREYS. In massive covers, containing the Medallion and Cypher of Shakspeare. Square post 8vo. 21s.

The **HISTORY of OUR LORD**, as exemplified in Works of Art. Being the fourth and concluding series of 'Sacred and Legendary Art.' By Mrs. JAMESON and Lady EASTLAKE. Second Edition, with 13 Etchings and 281 Woodcuts. 2 vols. square crown 8vo. 42s.

In the same Series, by Mrs. JAMESON.

Legends of the Saints and Martyrs. Fourth Edition, with 19 Etchings and 187 Woodcuts. 2 vols. 31s. 6d.

Legends of the Monastic Orders. Third Edition, with 11 Etchings and 88 Woodcuts. 1 vol. 21s.

Legends of the Madonna. Third Edition, with 27 Etchings and 165 Woodcuts. 1 vol. 21s.

Arts, Manufactures, &c.

DRAWING from NATURE; a Series of Progressive Instructions in Sketching, from Elementary Studies to Finished Views, with Examples from Switzerland and the Pyrenees. By GEORGE BARNARD, Professor of Drawing at Rugby School. With 18 Lithographic Plates, and 103 Wood Engravings. Imp. 8vo. 25s.

ENCYCLOPÆDIA of ARCHITECTURE, Historical, Theoretical, and Practical. By JOSEPH GWILT. With more than 1,000 Woodcuts. 8vo. 42s.

TUSCAN SCULPTORS, their Lives, Works, and Times. With 45 Etchings and 28 Woodcuts from Original Drawings and Photographs. By CHARLES C. PERKINS. 2 vols. imperial 8vo. 63s.

The **GRAMMAR of HERALDRY**: containing a Description of all the Principal Charges used in Armory, the Signification of Heraldic Terms, and the Rules to be observed in Blazoning and Marshalling. By JOHN E. CUSSANS. Fcp. with 196 Woodcuts, 4s. 6d.

The **ENGINEER'S HANDBOOK**; explaining the Principles which should guide the young Engineer in the Construction of Machinery. By C. S. LOWNDES. Post 8vo. 5s.

The ELEMENTS of MECHANISM. By T. M. GOODEVE, M.A. Professor of Mechanics at the R. M. Acad. Woolwich. Second Edition, with 217 Woodcuts. Post 8vo. 6s. 6d.

JRE'S DICTIONARY of ARTS, MANUFACTURES, and MINES. Re-written and enlarged by ROBERT HUNT, F.R.S. assisted by numerous gentlemen eminent in Science and the Arts. With 2,000 Woodcuts. 3 vols. 8vo. 24s.

ENCYCLOPÆDIA of CIVIL ENGINEERING, Historical, Theoretical, and Practical. By E. CRESY, C.E. With above 3,000 Woodcuts. 8vo. 42s.

TREATISE on MILLS and MILLWORK. By W. FAIRBAIRN, C.E. Second Edition, with 18 Plates and 322 Woodcuts. 2 vols. 8vo. 32s.

Useful Information for Engineers. By the same Author. FIRST and SECOND SERIES, with many Plates and Woodcuts. 2 vols. crown 8vo. 10s. 6d. each.

The Application of Cast and Wrought Iron to Building Purposes. By the same Author. Third Edition, with 6 Plates and 118 Woodcuts. 8vo. 16s.

IRON SHIP BUILDING, its History and Progress, as comprised in a Series of Experimental Researches on the Laws of Strain; the Strengths, Forms, and other conditions of the Material; and an Inquiry into the Present and Prospective State of the Navy, including the Experimental Results on the Resisting Powers of Armour Plates and Shot at High Velocities. By the same Author. With 4 Plates and 130 Woodcuts. 8vo. 18s.

The PRACTICAL MECHANIC'S JOURNAL: an Illustrated Record of Mechanical and Engineering Science, and Epitome of Patent Inventions. 4to. price 1s. monthly.

The PRACTICAL DRAUGHTSMAN'S BOOK of INDUSTRIAL DESIGN. By W. JOHNSON, Assoc. Inst. C.E. With many hundred Illustrations. 4to. 28s. 6d.

The PATENTEE'S MANUAL. a Treatise on the Law and Practice of Letters Patent for the use of Patentees and Inventors. By J. and J. H. JOHNSON. Post 8vo. 7s. 6d.

The ARTISAN CLUB'S TREATISE on the STEAM ENGINE, in its various Applications to Mines, Mills, Steam Navigation, Railways and Agriculture. By J. BOURNE, C.E. Seventh Edition; with 37 Plates and 546 Woodcuts. 4to. 42s.

Catechism of the Steam Engine, in its various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture. By the same Author. With 199 Woodcuts. Fcp. 9s. The INTRODUCTION of 'Recent Improvements' may be had separately, with 110 Woodcuts, price 3s. 6d.

Handbook of the Steam Engine. By the same Author, forming a KEY to the Catechism of the Steam Engine, with 67 Woodcuts. Fcp. 9s.

TREATISE on the SCREW PROPELLER, SCREW VESSELS, and Screw Engines, as adapted for purposes of Peace and War; illustrated by many Plates and Woodcuts. By the same Author. New and enlarged Edition, in course of publication in 24 Parts. Royal 4to. 2s. 6d. each.

The THEORY of WAR Illustrated by numerous Examples from History. By Lieut.-Col. P. L. MACDOUGALL. Third Edition, with 10 Plans. Post 8vo. 10s. 6d.

The ART of PERFUMERY; the History and Theory of Odours, and the Methods of Extracting the Aromas of Plants. By Dr. PRISSER, F.C.S. Third Edition, with 53 Woodcuts. Crown 8vo. 10s. 6d.

Chemical, Natural, and Physical Magic, for Juveniles during the Holidays. By the same Author. Third Edition, enlarged, with 38 Woodcuts. Fcp. 6s.

TALPA; or the Chronicles of a Clay Farm. By C. W. HOSKINS Esq. Sixth Edition, with 24 Woodcuts by G. CRUIKSHANK. 16mo. 5s. 6d.

LOUDON'S ENCYCLOPÆDIA of AGRICULTURE: comprising the Laying-out, Improvement, and Management of Landed Property, and the Cultivation and Economy of the Productions of Agriculture. With 1,100 Woodcuts. 8vo. 31s. 6d.

Loudon's *Encyclopædia of Gardening*: comprising the Theory and Practice of Horticulture, Floriculture, Arboriculture, and Landscape Gardening. With 1,000 Woodcuts. 8vo. 31s. 6d.

Loudon's *Encyclopædia of Cottage, Farm, and Villa Architecture* and Furniture. With more than 2,000 Woodcuts. 8vo. 42s.

HISTORY of WINDSOR GREAT PARK and WINDSOR FOREST. By WILLIAM MENZIES, Resident Deputy Surveyor. With 2 Maps and 2 Photographs. Imp. folio, £8 8s.

BAYLDON'S ART of VALUING RENTS and TILLAGES, and Claims of Tenants upon Quitting Farms, both at Michaelmas and Lady-Day. Eighth Edition, revised by J. C. MORTON. 8vo. 10s. 6d.

Religious and Moral Works.

An **EXPOSITION of the 39 ARTICLES**, Historical and Doctrinal. By E. HAROLD BROWNE, D.D. Lord Bishop of Ely. Seventh Edit. 8vo. 16s.

The Pentateuch and the Elohistic Psalms, in Reply to Bishop Colenso. By the same. Second Edition. 8vo. 2s.

Examination Questions on Bishop Browne's Exposition of the Articles. By the Rev. J. GOBLE, M.A. Fcp. 3s. 6d.

FIVE LECTURES on the CHARACTER of ST. PAUL; being the Hulsean Lectures for 1862. By the Rev. J. S. HOWSON, D.D. Second Edition. 8vo. 9s.

The LIFE and EPISTLES of ST. PAUL. By W. J. CONYBEARE, M.A. late Fellow of Trin. Coll. Cantab. and J. S. HOWSON, D.D. late Principal of Liverpool College. LIBRARY EDITION, with all the Original Illustrations, Maps, Landscape on Steel, Woodcuts, &c. 2 vols. 4to. 42s.

INTERMEDIATE EDITION, with a Selection of Maps, Plates, and Woodcuts. 2 vols. square 8vo. 31s. 6d.

PEOPLE'S EDITION, revised and condensed, with 46 Illustrations and Maps. 2 vols. crown 8vo. 12s.

The VOYAGE and SHIPWRECK of ST. PAUL; with Dissertation on the Life and Writings of St. Luke and the Ships and Navigation of the Ancients. By JAMES SMITH, of Jordanhill, F.R.S. Third Edition, with Frontispiece, 4 Charts, and 11 Woodcuts. Crown 8vo. 10s. 6d.

FASTI SACRI, or a Key to the Chronology of the New Testament; comprising an Historical Harmony of the Four Gospels, and Chronological Tables generally from B.C. 70 to A.D. 70: with a Preliminary Dissertation on the Chronology of the New Testament, and other Aids to the elucidation of the subject. By THOMAS LEWIN, M.A. F.S.A. Imperial 8vo. 42s.

A CRITICAL and GRAMMATICAL COMMENTARY on ST. PAUL'S Epistles. By C. J. ELICOTT, D.D. Lord Bishop of Gloucester and Bristol. 8vo.

Galatians, Third Edition, 8s. 6d.

Ephesians, Third Edition, 8s. 6d.

Pastoral Epistles, Third Edition, 10s. 6d.

Philippians, Colossians, and Philemon, Third Edition, 10s. 6d.

Thessalonians, Second Edition, 7s. 6d.

Historical Lectures on the Life of our Lord Jesus Christ: being the Hulsean Lectures for 1859. By the same Author. Fourth Edition. 8vo. price 10s. 6d.

The Destiny of the Creature; and other Sermons preached before the University of Cambridge. By the same. Fourth Edition. Post 8vo. 5s.

The Broad and the Narrow Way; Two Sermons preached before the University of Cambridge. By the same. Crown 8vo. 2s.

Rev. T. H. HORNE'S INTRODUCTION to the CRITICAL STUDY and Knowledge of the Holy Scriptures. Eleventh Edition, corrected and extended under careful Editorial revision. With 4 Maps and 22 Woodcuts and Facsimiles. 4 vols. 8vo. £2 13s. 6d.

Rev. T. H. Horne's Compendious Introduction to the Study of the Bible, being an Analysis of the larger work by the same Author. Re-edited by the Rev. JOHN AYRE, M.A. With Maps, &c. Post 8vo. 9s.

The TREASURY of BIBLE KNOWLEDGE; being a Dictionary of the Books, Persons, Places, Events, and other matters of which mention is made in Holy Scripture: intended to establish its Authority and illustrate its Contents. By Rev. J. AYRE, M.A. With Maps, 16 Plates, and numerous Woodcuts. Fcp. 10s. 6d.

The GREEK TESTAMENT; with Notes, Grammatical and Exegetical. By the Rev. W. WEBSTER, M.A. and the Rev. W. F. WILKINSON, M.A. 2 vols. 8vo. £2 4s.

VOL. I. the Gospels and Acts, 20s.

VOL. II. the Epistles and Apocalypse, 24s.

EVERY-DAY SCRIPTURE DIFFICULTIES explained and illustrated. By J. E. PRESCOTT, M.A. VOL. I. *Matthew* and *Mark*; VOL. II. *Luke* and *John*. 2 vols. 8vo. 9s. each.

The PENTATEUCH and BOOK of JOSHUA CRITICALLY EXAMINED. By the Right Rev. J. W. COLENZO, D.D. Lord Bishop of Natal. People's Edition, in 1 vol. crown 8vo. 6s. or in 5 Parts, 1s. each.

The PENTATEUCH and BOOK of JOSHUA CRITICALLY EXAMINED. By Prof. A. KUENEN, of Leyden. Translated from the Dutch, and edited with Notes, by J. W. COLENZO, D.D. Bishop of Natal. 8vo. 8s. 6d.

The CHURCH and the WORLD: Essays on Questions of the Day. By Various Writers. Edited by the Rev. ORBY SHIPLEY, M.A. 8vo. 15s.

The FORMATION of CHRISTENDOM. PART I. By T. W. ALLIES, 8vo. 12s.

CHRISTENDOM'S DIVISIONS: a Philosophical Sketch of the Divisions of the Christian Family in East and West. By EDMUND S. FOULKES, formerly Fellow and Tutor of Jesus Coll. Oxford. Post 8vo. 7s. 6d.

Christendom's Divisions, PART II. Greeks and Latins, being a History of their Dissensions and Overtures for Peace down to the Reformation. By the same Author. [Nearly ready.]

The LIFE of CHRIST: an Eclectic Gospel, from the Old and New Testaments, arranged on a New Principle, with Analytical Tables, &c. By CHARLES DE LA PEYME, M.A. Trin. Coll. Camb. Revised Edition. 8vo. 5s.

The HIDDEN WISDOM of CHRIST and the KEY of KNOWLEDGE: or, History of the Apocrypha. By ERNEST DE BUNSEN. 2 vols. 8vo. 28s.

ESSAYS on RELIGION and LITERATURE. Edited by the Most Rev. Archbishop MANNING. 8vo. 10s. 6d.

The TEMPORAL MISSION of the HOLY GHOST; or, Reason and Revelation. By the Most Rev. Archbishop MANNING. Second Edition. Crown 8vo. 8s. 6d.

ESSAYS and REVIEWS. By the Rev. W. TEMPLE, D.D. the Rev. R. WILLIAMS, B.D. the Rev. B. POWELL, M.A. the Rev. H. B. WILSON, B.D. C. W. GOODWIN, M.A. the Rev. M. PATTISON, B.D. and the Rev. B. JOWETT, M.A. Twelfth Edition. Fcp. 8vo. 5s.

MOSHEIM'S ECCLESIASTICAL HISTORY. MURDOCK and SOAMES's Translation and Notes, re-edited by the Rev. W. STUBBS, M.A. 3 vols. 8vo. 45s.

BISHOP JEREMY TAYLOR'S ENTIRE WORKS: With Life by BISHOP HEBER. Revised and corrected by the Rev. C. P. EDEN, 10 vols. price £5 5s.

PASSING THOUGHTS on RELIGION. By the Author of 'Amy Herbert.' New Edition. Fcp. 8vo. 5s.

Thoughts for the Holy Week, for Young Persons. By the same Author. Third Edition. Fcp. 8vo. 2s.

Night Lessons from Scripture. By the same Author. Second Edition. 32mo. 3s.

Self-Examination before Confirmation. By the same Author. 32mo. price 1s. 6d.

Readings for a Month Preparatory to Confirmation, from Writers of the Early and English Church. By the same. Fcp. 4s.

Readings for Every Day in Lent, compiled from the Writings of Bishop JEREMY TAYLOR. By the same. Fcp. 5s.

Preparation for the Holy Communion; the Devotions chiefly from the works of JEREMY TAYLOR. By the same. 32mo. 3s.

MORNING CLOUDS. Second Edition. Fcp. 5s.

PRINCIPLES of EDUCATION Drawn from Nature and Revelation and applied to Female Education in the Upper Classes. By the same. 2 vols. fcp. 12s. 6d.

The WIFE'S MANUAL; or, Prayers, Thoughts, and Songs on Several Occasions of a Matron's Life. By the Rev. W. CALVERT, M.A. Crown 8vo. price 10s. 6d.

SPIRITUAL SONGS for the **SUNDAYS** and **HOLIDAYS** throughout the Year. By J. S. B. MONSELL, LL.D. Vicar of Egham. Fourth Edition. Fcp. 4s. 6d.

The Beatitudes: Abasement before God; Sorrow for Sin; Meekness of Spirit; Desire for Holiness; Gentleness; Purity of Heart; the Peacemakers; Sufferings for Christ. By the same. Third Edition, fcp. 3s. 6d.

LYRA DOMESTICA; Christian Songs for Domestic Edification. Translated from the *Psaltery and Harp* of C. J. P. SPITTA, and from other sources, by RICHARD MASSIE. FIRST and SECOND SERIES, fcp. 4s. 6d. each.

LYRA SACRA; Hymns, Ancient and Modern, Odes and Fragments of Sacred Poetry. Edited by the Rev. B. W. SAVILE, M.A. Third Edition, enlarged and improved. Fcp. 5s.

LYRA GERMANICA, translated from the German by Miss C. WINKWORTH. FIRST SERIES, Hymns for the Sundays and Chief Festivals; SECOND SERIES, the Christian Life. Fcp. 5s. each SERIES.

Hymns from *Lyra Germanica*, 18mo. 1s.

LYRA EUCHARISTICA; Hymns and Verses on the Holy Communion, Ancient and Modern: with other Poems. Edited by the Rev. ORBY SHIPLEY, M.A. Second Edition. Fcp. 7s. 6d.

Lyra Messianica; Hymns and Verses on the Life of Christ, Ancient and Modern; with other Poems. By the same Editor. Second Edition, altered and enlarged. Fcp. 7s. 6d.

Lyra Mystica; Hymns and Verses on Sacred Subjects, Ancient and Modern. By the same Editor. Fcp. 7s. 6d.

The CHORALE BOOK for ENGLAND; a complete Hymn-Book in accordance with the Services and Festivals of the Church of England: the Hymns translated by Miss C. WINKWORTH; the tunes arranged by Prof. W. S. BENNETT and OTTO GOLDSCHMIDT. Fcp. 4to. 12s. 6d.

Congregational Edition. Fcp. 2s.

The CATHOLIC DOCTRINE of the ATONEMENT: an Historical Inquiry into its Development in the Church; with an Introduction on the Principle of Theological Developments. By H. N. OXENHAM, M.A. formerly Scholar of Balliol College, Oxford. 8vo. 8s. 6d.

FROM SUNDAY TO SUNDAY: an attempt to consider familiarly the Weekday Life and Labours of a Country Clergyman. By R. GEE, M.A. Vicar of Abbott's Langley and Rural Dean. Fcp. 5s.

Our Sermons; An Attempt to consider familiarly, but reverently, the Preacher's Work in the present day. By the same Author. [In October.

FIRST SUNDAYS at CHURCH; or, Familiar Conversations on the Morning and Evening Services of the Church of England. By J. E. RIDDLE, M.A. Fcp. 2s. 6d.

The JUDGMENT of CONSCIENCE, and other Sermons. By RICHARD WHATELY, D.D. late Archbishop of Dublin. Crown 8vo. 4s. 6d.

PALEY'S MORAL PHILOSOPHY, with Annotations. By RICHARD WHATELY, D.D. late Archbishop of Dublin. 8vo. 7s.

Travels, Voyages, &c.

OUTLINE SKETCHES of the **HIGH ALPS** of **DAUPHINÉ**. By T. G. BONNEY, M.A. F.G.S. M.A.C. Fellow of St. John's Coll. Camb. With 13 Plates and a Coloured Map. Post 4to. 16s.

ICE-CAVES of **FRANCE** and **SWITZERLAND**; a Narrative of Subterranean Exploration. By the Rev. G. F. BROWNE, M.A. Fellow and Assistant-Tutor of St. Catherine's Coll. Cambridge, M.A.C. With 11 Illustrations on Wood. Square crown 8vo. 12s. 6d.

VILLAGE LIFE in **SWITZERLAND**. By SOPHIA D. DELMARD. Post 8vo. 9s. 6d.

HOW WE SPENT the SUMMER; or, a Voyage en Zigzag in Switzerland and Tyrol with some Members of the **ALPINE CLUB**. From the Sketch-Book of one of the Party. Third Edition, re-drawn. In oblong 4to. with about 300 Illustrations, 16s.

BEATEN TRACKS; or, Pen and Pencil Sketches in Italy. By the Authoress of 'A Voyage en Zigzag.' With 42 Plates, containing about 200 Sketches from Drawings made on the Spot. 8vo. 16s.

MAP of the **CHAIN** of **MONT BLANC**, from an actual Survey in 1863—1864. By A. ADAMS-REILLY, F.R.G.S. M.A.C. Published under the Authority of the Alpine Club. In Chromolithography on extra stout drawing-paper 28in. x 17in. price 10s. or mounted on canvas in a folding case, 12s. 6d.

TRANSYLVANIA, its **PRODUCTS** and its **PEOPLE**. By CHARLES BONER. With 5 Maps and 43 Illustrations on Wood and in Chromolithography. 8vo. 21s.

EXPLORATIONS in **SOUTH WEST AFRICA**, from Walvisch Bay to Lake Ngami and the Victoria Falls. By THOMAS BAINES, F.R.G.S. 8vo. with Map and Illustrations, 21s.

VANCOUVER ISLAND and **BRITISH COLUMBIA**; their History, Resources, and Prospects. By MATTHEW MACFIE, F.R.G.S. With Maps and Illustrations. 8vo. 18s.

HISTORY of DISCOVERY in our **AUSTRALASIAN COLONIES**, Australia, Tasmania, and New Zealand, from the Earliest Date to the Present Day. By WILLIAM HOWITT. With 3 Maps of the Recent Explorations from Official Sources. 2 vols. 8vo. 20s.

The CAPITAL of the TYCOON; a Narrative of a Three Years' Residence in Japan. By Sir RUTHERFORD ALCOCK, K.C.B. 2 vols. 8vo. with numerous Illustrations, 42s.

LAST WINTER in ROME. By C. R. WELD. With Portrait and Engravings on Wood. Post 8vo. 14s.

Florence, the New Capital of Italy. By the same Author. Post 8vo. [In October.

AUTUMN RAMBLES in NORTH AFRICA. By JOHN ORMSBY, of the Middle Temple. With 16 Illustrations. Post 8vo. 8s. 6d.

The DOLOMITE MOUNTAINS. Excursions through Tyrol, Carinthia, Carniola, and Friuli in 1861, 1862, and 1863. By J. GILBERT and G. C. CHURCHILL, F.R.G.S. With numerous Illustrations. Square crown 8vo. 21s.

A SUMMER TOUR in the **GRISONS** and **ITALIAN VALLEYS** of the Bernina. By Mrs. HENRY FRESHFIELD. With 2 Coloured Maps and 4 Views. Post 8vo. 10s. 6d.

Alpine Byeways; or, Light Leaves gathered in 1859 and 1860. By the same Authoress. Post 8vo. with Illustrations, 10s. 6d.

A LADY'S TOUR ROUND MONTE ROSA; including Visits to the Italian Valleys. With Map and Illustrations. Post 8vo. 14s.

GUIDE to the PYRENEES, for the use of Mountaineers. By CHARLES PACKE. With Maps, &c. and Appendix. Fcp. 6s.

The ALPINE GUIDE. By JOHN BALL, M.R.I.A. late President of the Alpine Club. Post 8vo. with Maps and other Illustrations.

Guide to the Eastern Alps, *nearly ready*.

Guide to the Western Alps, including Mont Blanc, Monte Rosa, Zermatt, &c. 7s. 6d.

Guide to the Oberland and all Switzerland, excepting the Neighbourhood of Monte Rosa and the Great St. Bernard; with Lombardy and the adjoining portion of Tyrol. 7s. 6d.

A GUIDE to SPAIN. By H. O'SHEA. Post 8vo. with Travelling Map, 15s.

CHRISTOPHER COLUMBUS; his Life, Voyages, and Discoveries. Revised Edition; with 4 Woodcuts. 18mo. 2s. 6d.

CAPTAIN JAMES COOK; his Life, Voyages, and Discoveries. Revised Edition, with numerous Woodcuts. 18mo. 2s. 6d.

HUMBOLDT'S TRAVELS and DISCOVERIES in SOUTH AMERICA. Third Edition, with numerous Woodcuts. 18mo. 2s. 6d.

MUNGO PARK'S LIFE and TRAVELS in AFRICA, with an Account of his Death and the Substance of Later Discoveries. Sixth Edition, with Woodcuts. 18mo. 2s. 6d.

NARRATIVES of SHIPWRECKS of the ROYAL NAVY between 1793 and 1857, compiled from Official Documents in the Admiralty by W. O. S. GILLY; with a Preface by W. S. GILLY, D.D. Third Edition, fcp. 5s.

A WEEK at the LAND'S END. By J. T. BLIGHT; assisted by E. H. RODD, R. Q. COUCH, and J. RALFS. With Map and 96 Woodcuts. Fcp. price 6s. 6d.

VISITS to REMARKABLE PLACES: Old Halls, Battle-Fields, and Scenes Illustrative of Striking Passages in English History and Poetry. By WILLIAM HOWITT. 2 vols. square crown 8vo. with Wood Engravings, price 25s.

The RURAL LIFE of ENGLAND. By the same Author. With Woodcuts by Bewick and Williams. Medium 8vo. 12s. 6d.

Works of Fiction.

ATHERSTONE PRIORY. By L. N. COMYN. 2 vols. post 8vo. 21s.

Ellice: a Tale. By the same Author. Post 8vo. 9s. 6d.

STORIES and TALES by the Author of 'Amy Herbert,' uniform Edition, each Tale or Story complete in a single Volume.

AMY HERBERT, 2s. 6d.

GERTRUDE, 2s. 6d.

EARL'S DAUGHTER, 2s. 6d.

EXPERIENCE OF LIFE, 2s. 6d.

CLEVE HALL, 3s. 6d.

IVORS, 3s. 6d.

KATHARINE ASHTON, 3s. 6d.

MARGARET PERCIVAL, 5s.

LANETON PARSONAGE, 4s. 6d.

URSULA, 4s. 6d.

A Glimpse of the World. By the Author of 'Amy Herbert.' Fcp. 7s. 6d.

THE SIX SISTERS of the VALLEYS: an Historical Romance. By W. BRAMLEY-MOORE, M.A. Incumbent of Gerrard's Cross, Bucks. Third Edition, with 14 Illustrations. Crown 8vo. 5s.

The GLADIATORS: A Tale of Rome and Judaea. By G. J. WHYTE MELVILLE. Crown 8vo. 5s.

Digby Grand, an Autobiography. By the same Author. 1 vol. 5s.

Kate Coventry, an Autobiography. By the same. 1 vol. 5s.

General Bounce, or the Lady and the Locusts. By the same. 1 vol. 5s.

Holmby House, a Tale of Old Northamptonshire. 1 vol. 5s.

Good for Nothing, or All Down Hill. By the same. 1 vol. 6s.

The Queen's Maries, a Romance of Holyrood. 1 vol. 6s.

The Interpreter, a Tale of the War. By the same. 1 vol. 5s.

TALES from GREEK MYTHOLOGY. By GEORGE W. COX, M.A. late Scholar of Trin. Coll. Oxon. Second Edition. Square 16mo. 3s. 6d.

Tales of the Gods and Heroes. By the same Author. Second Edition. Fcp. 5s.

Tales of Thebes and Argos. By the same Author. Fcp. 4s. 6d.

BECKER'S GALLUS; or, Roman Scenes of the Time of Augustus: with Notes and Excursions illustrative of the Manners and Customs of the Ancient Romans. New Edition. Post 8vo. 7s. 6d.

BECKER'S CHARICLES; a Tale illustrative of Private Life among the Ancient Greeks: with Notes and Excursions. New Edition. Post 8vo. 7s. 6d.

ICELANDIC LEGENDS. Collected by JON ARNASON. Selected and Translated from the Icelandic by G. E. J. POWELL and E. MAGNUSSON. SECOND SERIES, with Notes and an Introductory Essay on the Origin and Genius of the Icelandic Folk-Lore, and 3 Illustrations on Wood. Cr. 8vo. 21s.

The WARDEN: a Novel. By ANTHONY TROLLOPE. Crown 8vo. 2s. 6d.

Barchester Towers: a Sequel to 'The Warden.' By the same Author. Crown 8vo. 3s. 6d.

Poetry and The Drama.

GOETHE'S SECOND FAUST. Translated by JOHN ANSTER, LL.D. M.R.I.A. Regius Professor of Civil Law in the University of Dublin. Post 8vo. 15s.

ASSO'S JERUSALEM DELIVERED. Translated into English Verse by Sir J. KINGSTON JAMES, Kt. M.A. 2 vols. fcp. with Facsimile, 14s.

POETICAL WORKS of JOHN EDMUND READE; with final Revision and Additions. 3 vols. fcp. 18s. or each vol. separately, 6s.

MOORE'S POETICAL WORKS, Cheapest Editions complete in 1 vol. including the Autobiographical Prefaces and Author's last Notes, which are still copyright. Crown 8vo. ruby type, with Portrait, 6s. or People's Edition, in larger type, 12s. 6d.

Moore's Poetical Works, as above, Library Edition, medium 8vo. with Portrait and Vignette, 14s. or in 10 vols. fcp. 3s. 6d. each.

MOORE'S IRISH MELODIES, 32mo. Portrait, 1s. 16mo. Vignette, 2s. 6d.

MacLise's Edition of Moore's Irish Melodies, with 161 Steel Plates from Original Drawings. Super-royal 8vo. 31s. 6d.

MacLise's Edition of Moore's Irish Melodies with all the Original Designs (as above) reduced by a New Process. Imp. 16mo. 10s. 6d.

MOORE'S LALLA ROOKH. 32mo. Plate, 1s. 16mo. Vignette, 2s. 6d.

Tenniel's Edition of Moore's Lalla Rookh, with 68 Wood Engravings from original Drawings and other Illustrations. Fcp. 4to. 21s.

SOUTHEY'S POETICAL WORKS, with the Author's last Corrections and copyright Additions. Library Edition, in 1 vol. medium 8vo. with Portrait and Vignette, 14s. or in 10 vols. fcp. 3s. 6d. each.

LAYS of ANCIENT ROME; with *Ivy* and the *Armada.* By the Right Hon. LORD MACAULAY. 16mo. 4s. 6d.

Lord Macaulay's Lays of Ancient Rome. With 90 Illustrations on Wood, Original and from the Antique, from Drawings by G. SCHAFER. Fcp. 4to. 21s.

Lord Macaulay's Lays of Ancient Rome, with all the Original Designs (as above) reduced by a New Process. Imp. 16mo. price 10s. 6d. cloth, gilt edges; or 21s. bound in morocco by Rivière.

POEMS. By JEAN INGELOW. Eleventh Edition. Fcp. 8vo. 5s.

Poems by Jean Ingelow. A New Edition, with nearly 100 Illustrations by Eminent Artists, engraved on Wood by the Brothers DALZIEL. Fcp. 4to. 21s.

POETICAL WORKS of LETITIA ELIZABETH LANDON (L.E.L.) 2 vols. 16mo. 10s.

PLAYTIME with the POETS: a Selection of the best English Poetry for the use of Children. By a LADY. Revised Edition. Crown 8vo. 5s.

BOWDLER'S FAMILY SHAKSPEARE, cheaper Genuine Edition, complete in 1 vol. large type, with 36 Woodcut Illustrations, price 14s. or with the same ILLUSTRATIONS, in 6 pocket vols. 3s. 6d. each.

ARUNDINES CAMI, sive Musarum Cantabrigiensium Lusus canori. Collegit atque edidit H. DEURY, M.A. Editio Sexta, curavit H. J. HODGSON, M.A. Crown 8vo. 7s. 6d.

The ILIAD of HOMER TRANSLATED into BLANK VERSE. By ICHABOD CHARLES WRIGHT, M.A. late Fellow of Magd. Coll. Oxon. 2 vols. crown 8vo. 21s.

The ILIAD of HOMER in ENGLISH HEXAMETER VERSE. By J. HENRY DART, M.A. of Exeter College, Oxford: Author of 'The Exile of St. Helena, Newdigate, 1838.' Square crown 8vo. 21s.

DANTE'S DIVINE COMEDY, translated in English *Terza Rima* by JOHN DAYMAN, M.A. [With the Italian Text, after Brunetti, interpaged.] 8vo. 21s.

Rural Sports, &c.

ENCYCLOPÆDIA of RURAL SPORTS; a complete Account, Historical, Practical, and Descriptive, of Hunting, Shooting, Fishing, Racing, &c. By D. P. BLAINE. With above 600 Woodcuts (20 from Designs by JOHN LEECH). 8vo. 42s.

NOTES on RIFLE SHOOTING. By Captain HEATON, Adjutant of the Third Manchester Rifle Volunteer Corps. Revised Edition. Fcp. 2s. 6d.

COL. HAWKER'S INSTRUCTIONS to YOUNG SPORTSMEN in all that relates to Guns and Shooting. Revised by the Author's SON. Square crown 8vo. with Illustrations, 18s.

The RIFLE, its THEORY and PRACTICE. By ARTHUR WALKER (79th Highlanders), Staff. Hythe and Fleetwood Schools of Musketry. Second Edition. Crown 8vo. with 125 Woodcuts, 5s.

The DEAD SHOT, or Sportsman's Complete Guide; a Treatise on the Use of the Gun, Dog-breaking, Pigeon-shooting, &c. By MARKHAM. Revised Edition. Fcp. 8vo. with Plates, 5s.

HINTS on SHOOTING, FISHING, &c. both on Sea and Land and in the Fresh and Saltwater Lochs of Scotland; being the Experiences of C. IDLE. Second Edition, revised. Fcp. 6s.

The FLY-FISHER'S ENTOMOLOGY. By ALFRED RONALD. With coloured Representations of the Natural and Artificial Insect. Sixth Edition; with 20 coloured Plates. 8vo. 14s.

HANDBOOK of ANGLING: Teaching Fly-fishing, Trolling, Bottom-fishing, Salmon-fishing; with the Natural History of River Fish, and the best modes of Catching them. By EPHEMERA. Fcp. Woodcuts, 5s.

The CRICKET FIELD; or, the History and the Science of the Game of Cricket. By JAMES PYCROFT, B.A. Fourth Edition. Fcp. 5s.

The Cricket Tutor; a Treatise exclusively Practical. By the same. 18mo. 1s.

Cricketana. By the same Author. With 7 Portraits. Fcp. 5s.

The HORSE-TRAINER'S and SPORTMAN'S GUIDE: with Considerations on the Duties of Grooms, on Purchasing Blood Stock, and on Veterinary Examination. By DIGBY COLLINS. Post 8vo. 6s.

The HORSE'S FOOT, and HOW to KEEP IT SOUND. By W. MILES, Esq. Ninth Edition, with Illustrations. Imperial 8vo. 12s. 6d.

A Plain Treatise on Horse-Shoeing. By the same Author. Post 8vo. with Illustrations, 2s. 6d.

Stables and Stable-Fittings. By the same. Imp. 8vo. with 13 Plates, 15s.

Remarks on Horses' Teeth, addressed to Purchasers. By the same. Post 8vo. 1s. 6d.

On DRILL and MANŒUVRES of CAVALRY, combined with Horse Artillery. By Major-Gen. MICHAEL W. SMITH, C.B. Commanding the Poona Division of the Bombay Army. 8vo. 12s. 6d.

BLAINE'S VETERINARY ART; a Treatise on the Anatomy, Physiology, and Curative Treatment of the Diseases of the Horse, Neat Cattle and Sheep. Seventh Edition, revised and enlarged by C. STEEL, M.R.C.V.S.L. 8vo. with Plates and Woodcuts, 18s.

The HORSE: with a Treatise on Draught. By WILLIAM YOUNATT. New Edition, revised and enlarged. 8vo. with numerous Woodcuts, 10s. 6d.

The Dog. By the same Author. 8vo. with numerous Woodcuts, 6s.

The DOG in HEALTH and DISEASE. By STONEHENGE. With 70 Wood Engravings. Square crown 8vo. 16s.

The Greyhound. By the same Author. Revised Edition, with 24 Portraits of Greyhounds. Square crown 8vo. 21s.

The OX; his Diseases and their Treatment: with an Essay on Parturition in the Cow. By J. R. DOBSON, M.R.C.V.S. Crown 8vo. with Illustrations. price 7s. 6d.

Commerce, Navigation, and Mercantile Affairs.

PRACTICAL GUIDE for BRITISH SHIPMASTERS to UNITED States Ports. By PIERREPONT EDWARDS, Her Britannic Majesty's Vice-Consul at New York. Post 8vo. 8s. 6d.

A NAUTICAL DICTIONARY, defining the Technical Language relative to the Building and Equipment of Sailing Vessels and Steamers, &c. By ARTHUR YOUNG. Second Edition; with Plates and 150 Woodcuts. 8vo. 18s.

A DICTIONARY, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation. By J. R. M'CULLOCH, Esq. 8vo. with Maps and Plans, 50s.

A MANUAL for NAVAL CADETS. By J. M'NEIL BOYD, late Captain R.N. Third Edition; with 240 Woodcuts and 11 coloured Plates. Post 8vo. 12s. 6d.

The LAW of NATIONS Considered as Independent Political Communities. By TRAVERS TWISS, D.C.L. Regius Professor of Civil Law in the University of Oxford. 2 vols. 8vo. 30s. or separately, **PART I. Peace**, 12s. **PART II. War**, 18s.

Works of Utility and General Information.

MODERN COOKERY for PRIVATE FAMILIES, reduced to a System of Easy Practice in a Series of carefully-tested Receipts. By ELIZA ACTON. Newly revised and enlarged; with 8 Plates, Figures, and 150 Woodcuts. Fcp. 7s. 6d.

The HANDBOOK of DINING; or, Corpulency and Leanness scientifically considered. By BRILLAT-SAVARIN, Author of 'Physiologie du Goût.' Translated by L. F. SIMPSON. Revised Edition, with Additions. Fcp. 3s. 6d.

On FOOD and its DIGESTION; an Introduction to Dietetics. By W. BRINTON, M.D. Physician to St. Thomas's Hospital, &c. With 48 Woodcuts. Post 8vo. 12s.

WINE, the VINE, and the CELLAR. By THOMAS G. SHAW. Second Edition, revised and enlarged, with Frontispiece and 31 Illustrations on Wood. 8vo. 16s.

HOW TO BREW GOOD BEER. a complete Guide to the Art of Brewing Ale, Bitter Ale, Table Ale, Brown Stout, Porter, and Table Beer. By JOHN PITT. Revised Edition. Fcp. 4s. 6d.

A PRACTICAL TREATISE on BREWING; with Formulae for Public Brewers, and Instructions for Private Families. By W. BLACK. 8vo. 10s. 6d.

SHORT WHIST. By MAJOR A. Sixteenth Edition, revised, with an Essay on the Theory of the Modern Scientific Game by PROF. P. Fcp. 3s. 6d.

WHIST, WHAT TO LEAD. By CAM. Third Edition. 32mo. 1s.

HINTS on ETIQUETTE and the USAGES of SOCIETY; with a Glance at Bad Habits. Revised, with Additions, by a LADY of RANK. Fcp. price 2s. 6d.

TWO HUNDRED CHESS PROBLEMS, composed by F. HEALEY, including the Problems to which the Prizes were awarded by the Committees of the Era, the Manchester, the Birmingham, and the Bristol Chess Problem Tournaments; accompanied by the SOLUTIONS. Crown 8vo. with 200 Diagrams, 5s.

The CABINET LAWYER; a Popular Digest of the Laws of England, Civil and Criminal. Twenty-second Edition, extended by the Author; including the Acts of the Session 1866. Fcp. [Ready.

The PHILOSOPHY of HEALTH; or, an Exposition of the Physiological and Sanitary Conditions conducive to Human Longevity and Happiness. By SOUTHWOOD SMITH, M.D. Eleventh Edition, revised and enlarged: with 113 Woodcuts, 8vo. 15s.

HINTS to MOTHERS on the MANAGEMENT of their HEALTH during the Period of Pregnancy and in the Lying-in Room. By T. BULL, M.D. Fcp. 5s.

The Maternal Management of Children in Health and Disease. By the same Author. Fcp. 5s.

The LAW RELATING to BENEFIT BUILDING SOCIETIES; with Practical Observations on the Act and all the Cases decided thereon; also a Form of Rules and Forms of Mortgages. By W. TIDD PRATT, Barrister. Second Edition. Fcp. 3s. 6d.

NOTES on HOSPITALS. By FLORENCE NIGHTINGALE. Third Edition, enlarged; with 18 Plans. Post 4to. 18s.

C. M. WILLICH'S POPULAR TABLES for ascertaining the Value of Lifehold, Leasehold, and Church Property, Renewal Fines, &c.; the Public Funds; Annual Average Price and Interest on Consols from 1731 to 1861; Chemical, Geographical, Astronomical, Trigonometrical Tables, &c. Post 8vo. 10s.

THOMSON'S TABLES of INTEREST, at Three, Four, Four and a Half, and Five per Cent. from One Pound to Ten Thousand and from 1 to 365 Days. 12mo. 3s. 6d.

MAUNDER'S TREASURY of KNOWLEDGE and LIBRARY of Reference: comprising an English Dictionary and Grammar, Universal Gazetteer, Classical Dictionary, Chronology, Law Dictionary, a Synopsis of the Peerage, useful Tables, &c. Revised Edition. Fcp. 10s. 6d.

INDEX.

PAGE	PAGE		
ABHOTT on Sight and Touch	10	BROWNE's Ice Caves of France and Switzerland	15
ACTON's Modern Cookery	27	Exposition 39 Articles	22
ALCOCK's Residence in Japan	22	Pentateuch	18
ALLIES on Formation of Christendom	20	BOCKLIE's History of Civilization	2
Alpine Guide (The)	22	BULL's Hints to Mothers	28
APJOHN's Manual of the Metalloids	12	Maternal Management of Children	28
ARAGO's Biographies of Scientific Men	5	BUNSEN's Ancient Egypt	3
Popular Astronomy	10	BUNSEN on Apocrypha	20
ARNOLD's Manual of English Literature	7	BURKE's Vicissitudes of Families	5
ARNOTT's Elements of Physics	11	BURTON's Christian Church	3
ARUNDINES Cami	25		
Atherstone Priory	23		
Autumn holidays of a Country Parson	8		
AYRE's Treasury of Bible Knowledge	19		
		Cabinet Lawyer	29
BACON's Essays, by WHATELY	5	CALVERT's Wife's Manual	21
Life and Letters, by SPEDDING	5	Campaigner at Home	8
Works	6	CATE and FARLIE's Moral Emblems	16
BAIN on the Emotions and Will	10	Chorale Book for England	21
on the Senses and Intellect	10	CLOUGH's Lives from Plutarch	2
on the Study of Character	10	COLENSO (Bishop) on Pentateuch and Book of Joshua	19
BAINES's Explorations in S. W. Africa	22	COLLING's Horse-Trainer's Guide	26
BALL's Alpine Guide	23	COLUMBUS's Voyages	23
BARNARD's Drawing from Nature	16	Commonplace Philosopher in Town and Country	8
BAYLDON's Rents and Tillages	18	CONINGTON's Handbook of Chemical Analysis	13
Beaten Tracks	22	CONTANSHAU's Pocket French and English Dictionary	8
BECKER's Charicles and Gallus	24	Practical ditto	8
BEETHOVEN's Letters	4	CONYBEARE and HOWSON's Life and Epistles of St. Paul	18
BENFYEY's Sanskrit Dictionary	8	COOK's Voyages	23
BERRY's Journals and Correspondence	4	COPLAND's Dictionary of Practical Medicine	15
BLACK's Treatise on Brewing	28	Abridgment of ditto	15
BLACKLEY and FRIEDLANDER's German and English Dictionary	8	COX's Tales of the Great Persian War	2
BLAINE's Rural Sports	26	Tales from Greek Mythology	24
Veterinary Art	27	Tales of the Gods and Heroes	24
BLOIGHT's Week at the Land's End	23	Tales of Thebes and Argos	24
BOASSE's Essay on Human Nature	9	CRESSY's Encyclopaedia of Civil Engineering	17
Philosophy of Nature	9	Critical Essays of a Country Parson	8
BOOTH's Epigrams	9	CROWN's History of France	2
BONNER's Transylvania	22	CUSSANS's Grammar of Heraldry	16
BONNEY's Alps of Dauphiné	22		
BOURNE on Screw Propeller	17		
BOURNE's Catechism of the Steam Engine	17		
Handbook of Steam Engine	17		
Treatise on the Steam Engine	17		
BOWDLE's Family SHAKESPEARE	25		
BOYD's Manual for Naval Cadets	25		
BRAMLEY-MOORE's Six Sisters of the Valleys	24		
BRANDE's Dictionary of Science, Literature, and Art	13		
BRAY'S (C.) Education of the Feelings	10		
Philosophy of Necessity	10		
on Force	10		
BRINTON on Food and Digestion	27		
BRISTOW's Glossary of Mineralogy	11		
BRODE's (Sir C. B.) Works	15		
Autobiography	15		
Constitutional History	15		
	2	DART's Iliad of Homer	25
		DAYMAN's Dante's Divina Commedia	26
		D'AUBIGNÉ's History of the Reformation in the time of CALVIN	2
		Dead Shot (The), by MARKSMAN	26
		DE LA RIVE's Treatise on Electricity	11
		DELMARRE's Village Life in Switzerland	22
		DE LA PRYME's Life of Christ	20
		DE MORGAN on Matter and Spirit	9
		DE TOQUEVILLE's Democracy in America	2
		DOBSON on the Ox	27
		DUNCAN and MILLARD on Classification, &c. of the Idiotic	15
		DYKE's City of Rome	*

	PAGE		PAGE
EDWARDS'S Shipmaster's Guide	27	HUGHES'S (W.) Geography of British History	11
Elements of Botany	15	Manual of Geography	11
ELICE, A Tale	23	HULLAH'S History of Modern Music	4
ELLIOTT'S Broad and Narrow Way	19	Transition Musical Lectures	4
— Commentary on Ephesians	19	HUMBOLDT'S Travels in South America	23
— Destiny of the Creature	19	HUMPHREYS'S Sentiments of Shakspeare	16
— Lectures on Life of Christ	19	HUTTON'S Studies in Parliament	21
— Commentary on Galatians	19	Hymns from <i>Lyra Germanica</i>	21
— Pastoral Epistles	19		
— Philippians, &c.	19		
— Thessalonians	19		
ESSAYS AND REVIEWS	20	ICELANDIC LEGENDS. Second Series	24
— on Religion and Literature, edited by MANNING	20	IDLE'S Hints on Shooting	25
		INGLLOW'S Poems	25
FARBAIRN ON Iron Shipbuilding	17		
FAIRBAIRN'S Application of Cast and Wrought Iron to Building	17	JAMESON'S Legends of the Saints and Martyrs	16
— Information for Engineers	17	— Legends of the Madonna	16
— Treatise on Mills & Millwork	17	— Legends of the Monastic Orders	16
FARHAR'S Chapters on Language	7	JAMESON AND EASTLAKE'S History of Our Lord	16
FOULKE'S Christendom's Divisions	20	JOHN'S Home Walks and Holiday Rambles	16
FRASERFIELD'S Alpine Byways	23	JOHNSON'S Patentee's Manual	17
— Tour in the Grisons	23	JOHNSTON'S Practical Draughtsman	17
Friends in Council	9	JOHNSTON'S Gazetteer, or Geographical Dictionary	11
FROUDE'S History of England	1	JONES'S Christianity and Common Sense	16
GARRATT'S Marvels and Mysteries of Instinct	12		
GEZ'S Sunday to Sunday	21	KALISCH'S Commentary on the Bible	7
— Our Sermons	21	— Hebrew Grammar	7
GILBERT AND CHURCHILL'S Dolomite Mountains	22	KESTEVEN'S Domestic Medicine	15
GILLY'S Shipwrecks of the Navy	23	KIRBY AND SPENCE'S Entomology	12
GOETHE'S Second Faust, by ANSTER	24	KUENEN ON Pentateuch and Joshua	19
GOODRIVE'S Elements of Mechanism	17		
GORLÉ'S Questions on Baowna's Exposition of the 39 Articles	18	LADY'S Tour Round Monte Rosa	23
GRANT'S Ethics of Aristotle	5	LANDON'S (L. E. L.) Poetical Works	25
GRAVER THOUGHTS of a Country Parson	5	LATHAM'S English Dictionary	7
GRAY'S Anatomy	14	LICKY'S History of Rationalism	3
GREENE'S Corals and Sea Jellies	12	LEISURE HOURS IN TOWN	8
— Sponges and Animalculæ	12	LIVIUS' History of Philosophy	19
GROVE ON Correlation of Physical Forces	11	LEWIN'S Fasti Sacri	6
GWILT'S Encyclopaedia of Architecture	16	LEWIS ON Early Roman History	6
		— Essays on Administrations	6
Handbook of Angling, by EPHEMERA	26	— Fables of BARRIUS	6
HARR'S Election of Representatives	6	— on Foreign Jurisdiction	6
HARTWIG'S Sea and its Living Wonders	12	— on Irish Disturbances	6
— Harmonies of Nature	12	— on Observation and Reasoning in Politics	6
— Tropical World	12	— on Political Terms	6
HAUGHTON'S Manual of Geology	11	LIDDELL AND SCOTT'S Greek-English Lexicon	8
HAWKER'S Instructions to Young Sportsmen	26	— Abridged ditto	8
HEALEY'S Chess Problems	28	LIFE OF MAN SYMBOLISED	16
HEATON'S Notes on Rifle Shooting	26	LINDLEY AND MOORE'S Treasury of Botany	2
HEKEL'S Spanish Conquest in America	2	LONGMAN'S Lectures on the History of England	2
HERSCHEL'S Essays from the Edinburgh and Quarterly Reviews	13	LOUDON'S Agriculture	18
— Outlines of Astronomy	10	— Cottage, Farm, Villa Architecture	18
HEWITT ON the Diseases of Women	14	— Gardening	18
HINTS ON ETIQUETTE	28	— Plants	18
HODGSON'S Time and Space	10	— Trees and Shrubs	13
HOLLAND'S Essays on Scientific Subjects	13	LOWNDES'S Engineer's Handbook	16
HOLMES'S System of Surgery	14	LYRE DOMESTICA	21
HOOKE AND WALKER-ARNOTT'S British Flora	13	— Eucharistica	21
HORNE'S Introduction to the Scriptures	19	— Germanica	16, 21
— Compendium of ditto	19	— Messianica	21
HOSKYN'S Manual of Poisons	15	— Mystica	21
HOSKYN'S Taipa	18	— Sacra	21
HOW WE SPENT THE SUMMER	22		
HOWITT'S Australian Discovery	22	MACAULAY'S (Lord) Essays	3
— Rural Life of England	23	— History of England	1
— Visits to Remarkable Places	23	— Lays of Ancient Rome	25
HOWSON'S Hulcean Lectures on St. Paul	18	— Miscellaneous Writings	25
		— Speeches	25
		— Works	25

PAGE		PAGE	
MACDOUGALL's Theory of War.....	17	PACKE's Guide to the Pyrenees.....	23
MCCULLOCH's Dictionary of Commerce.....	27	PAGET's Lectures on Surgical Pathology.....	14
Geographical Dictionary.....	11	PARK's Life and Travels.....	23
MACPHERSON's Vancouver Island.....	23	PERKINS's Elements of Materia Medica.....	15
MAQUIGUE's Life of Father Mathew.....	4	Manual of Materia Medica.....	15
Rome and its Rulers.....	4	PERKINS's Tuscan Sculptors.....	16
MALING's Indoor Gardener.....	13	PHILLIPS's Guide to Geology.....	11
MANNING on Holy Ghost.....	20	Introduction to Mineralogy.....	11
MARSHMAN's Life of Havelock.....	5	PRESSE's Art of Perfumery.....	18
MASSEY's History of England.....	1	Chemical, Natural, and Physical	
MASSEY's History of the Reformation.....	4	Magic.....	18
MAUNDER's Biographical Treasury.....	4	PITT on Brewing.....	23
Geographical Treasury.....	11	Playtime with the Poets.....	25
Historical Treasury.....	3	Practical Mechanic's Journal.....	17
Scientific and Literary Treasury.....	13	PRATT's Law of Building Societies.....	28
Treasury of Knowledge.....	28	PREScott's Scripture Difficulties.....	19
Treasury of Natural History.....	12	PAOCTOR's Saturn.....	10
MAUDY's Physical Geography.....	10	Handbook of the Stars.....	10
MAY's Constitutional History of England.....	1	PVCROFT's Course of English Reading.....	7
MELVILLE's Digby Grand.....	24	Cricket Field.....	26
General Bounce.....	24	Cricket Tutor.....	26
Gladiators.....	24	Cricketana.....	26
Good for Nothing.....	21		
Holmby House.....	24	READE's Poetical Works.....	25
Interpreter.....	24	Recreations of a Country Parson.....	8
Kate Coventry.....	24	REILLY's Map of Mont Blanc.....	22
Queen's Maries.....	24	RIDDLE's First Sundays at Church.....	21
MENDELSSOHN's Letters.....	4	RIVER'S Rose Amateur's Guide.....	18
MENZIES's Windsor Great Park.....	18	ROGERS's Correspondence of Greyson.....	9
MERIVALE's (H.) Historical Studies.....	3	Eclipse of Faith.....	9
(C.) Fall of the Roman Republic.....	3	Defence of ditto.....	9
Boyle Lectures.....	3	Essays from the Edinburgh Review.....	9
Romanas under the Empire.....	2	Fulleriana.....	9
MILES on Horse's Foot and Horseshoeing.....	26	ROGERS's Thesaurus of English Words and	
on Horses' Teeth and Stables.....	26	Phrases.....	7
MILL on Liberty.....	6	RONALD's Fly-Fisher's Entomology.....	26
on Representative Government.....	6	ROWTON's Debater.....	7
on Utilitarianism.....	6	RUSSELL on Government and Constitution.....	1
MILL's Dissertations and Discussions.....	6		
Political Economy.....	6	SANDARS's Justinian's Institutes.....	5
System of Logic.....	6	SCOTT's Handbook of Volumetrical Analysis.....	13
Hamilton's Philosophy.....	6	SCROPE on Volcanos.....	11
MILLER's Elements of Chemistry.....	14	SENIOR's Essays.....	3
MONSELL's Spiritual Songs.....	21	SEWELL's Amy Herbert.....	24
Beatitudes.....	21	Cleve Hall.....	24
MONTGOMERY on Pregnancy.....	25	Earl's Daughter.....	24
MOORE's Irish Melodies.....	25	Examination for Confirmation.....	20
Lalla Rookh.....	25	Experience of Life.....	24
Journal and Correspondence.....	5	Gertrude.....	24
Poetical Works.....	25	Glimpse of the World.....	24
MORRILL's Elements of Psychology.....	9	History of the Early Church.....	3
Mental Philosophy.....	9	IYERS.....	24
Morning Clouds.....	20	Katharine Ashton.....	24
MOSHEIM's Ecclesiastical History.....	20	Langton Parsonage.....	24
MOZART's Letters.....	4	Margaret Percival.....	24
MÜLLER's (Max) Lectures on the Science of	7	Night Lessons from Scripture.....	30
Language.....	7	Passing Thoughts on Religion.....	20
(K. O.) Literature of Ancient	2	Preparation for Communion.....	20
Greece.....	2	Principles of Education.....	20
MURKINSON on Continued Fevers.....	14	Readings for Confirmation.....	20
MURKINSON's Language and Literature of Greece.....	2	Readings for Lent.....	20
		Stories and Tales.....	24
New Testament, illustrated with Wood Engravings from the Old Masters.....	15	Thoughts for the Holy Week.....	20
NEWMAN's History of his Religious Opinions.....	4	Ursula.....	24
NIGHTINGALE's Notes on Hospitals.....	28	SHAW's Work on Wine.....	28
		SHEDDEN's Elements of Logic.....	6
OALING's Animal Chemistry.....	14	SHIPLEY's Church and the World.....	19
Course of Practical Chemistry.....	14	Short Whist.....	28
Manual of Chemistry.....	14	SHOOT's Church History.....	3
ORMSBY's Rambles in Algeria and Tunis.....	14	SIRVERING's (AMELIA) Life, by WINKWORTH.....	4
O'SHEA's Guide to Spain.....	22	SIMPSON's Handbook of Dining.....	27
OWEN's Comparative Anatomy and Physiology of Vertebrate Animals.....	12	SIMTH's (SOUTHWOOD) Philosophy of Health.....	28
OXENHAM on Atonement.....	21	(J.) Paul's Voyage and Shipwreck.....	18
		(G.) Wesleyan Methodism.....	4
		(SYDNEY) Memoir and Letters.....	5
		Miscellaneous Works.....	9
		Moral Philosophy.....	9
		Wit and Wisdom.....	9

	PAGE	PAGE	
SMITH on Cavalry Drill and Manoeuvres.....	25	VAUGHAN's (R. A.) Hours with the Mystics	5
SOUTHEY's (Doctor).....	7	WALKER on the Rifle	1
Poetical Works.....	25	WATSON's Principles and Practice of Physic	1
STANLEY's History of British Birds	12	WATT's Dictionary of Chemistry.....	1
STERBING's Analysis of MILL's Logic.....	6	WEBB's Objects for Common Telescopes.....	1
STEPHEN's Essays in Ecclesiastical Biography.....	5	WEBSTER & WILKINSON's Greek Testament	1
Lectures on History of France	2	WELD's Last Winter in Rome.....	1
STERLING's Secret of Hegel.....	10	Florence.....	1
STONEBRIDGE on the Dog	27	WELLINGTON's Life, by BRIALMONT and	1
on the Greyhound.....	27	GLEIG	1
STRANGE on Sea Air	15	WEST on Children's Diseases	1
on Restoration of Health	15	WHATELY's English Synonyms	1
Sunday Afternoons at the Parish Church ..	8	Logic	2
TASSO's Jerusalem, by JAMES.....	25	Remains	2
TAYLOR's (Jeremy) Works, edited by EDEN	20	Rhetoric	2
TENNENT's Ceylon	12	Sermons	2
Natural History of Ceylon.....	12	Paley's Moral Philosophy	2
Wild Elephant.....	12	WHENWELL's History of the Inductive Sci-	1
THIRLWALL's History of Greece	2	ence	1
THOMSON's (Archbishop) Laws of Thought	6	Scientific Ideas	1
(J.) Tables of Interest	28	Whist, what to lead, by CAM	2
Conspicuum, by BIRKETT	15	WHITE and RIDDLE's Latin-English Dic-	7
TODD's Cyclopaedia of Anatomy and Phy-	14	tionaries	7
siology	14	WILBERFORCE (W.) Recollections of, by	5
and BOWMAN's Anatomy and Phy-	15	HARFORD	5
siology of Man.....	15	WILLCOX's Popular Tables	2
TROLLOPE's Barchester Towers	24	WILSON's Bryologia Britannica	13
Warden	24	WINDHAM's Diary	4
TWISS's Law of Nations	24	WOOD's Homer without Hands	12
TYNDALL's Lectures on Heat.....	11	WOODWARD's Historical and Chronological	3
Encyclopaedia	10	Encyclopaedia	3
Way to Rest.....	10	WRIGHT's Homer's Iliad	25
VAN DER HORST's Handbook of Zoology	12	YOUNG's English-Greek Lexicon	5
VAUGHAN's (R.) Revolutions in English	1	Abridged ditto	5
History	1	YOUNG's Nautical Dictionary	27
Way to Rest.....	10	YOUATT on the Dog	27
		on the Horse	27

LONDON

PRINTED BY SPOTTISWOODE AND CO.

NEW-STREET SQUARE

YA 01242

YA 01242

YA 01242

